

# The University of Texas at Austin what starts here changes the world

# The University of Texas at Austin

# Undergraduate Catalog 2018-2020



# **Table of Contents**

Introduction	. 6
Officers of the Administration	6
Board of Regents	. 7
Directory of Offices	. 7
The University	9
Organization of the University	9
Undergraduate Degrees	. 9
Degree Programs	10
Simultaneous Majors	13
Interdisciplinary Opportunities	13
Minor and Certificate Programs	13
Preparation for Health Professions	16
Preparation for Law	16
Preparation for Teacher Certification	16
Coursework in the Graduate School and the School of Law	18
Honors	19
Academic Advising	19
Graduation	20
General Requirements	20
Multiple Degrees	20
Graduation under a Particular Catalog	21
School of Undergraduate Studies	22
General Information	22
Admission and Registration	22
Academic Policies and Procedures	22
Minor and Certificate Programs	24
Courses	25
Programs and Centers	28
School of Architecture	30
General Information	30
Admission and Registration	32
Academic Policies and Procedures	34
Graduation	34
Degrees and Programs	35
Bachelor of Science in Interior Design	35
Suggested Arrangement of Courses	36
Bachelor of Architecture	36
Suggested Arrangement of Courses	37
Bachelor of Architecture/Bachelor of Science in Architectural Engineering Dual Degree Program	37
Suggested Arrangement of Courses	38

Bachelor of Architecture/Bachelor of Arts, Plan II Dual Degree Program	39
Suggested Arrangement of Courses	
Bachelor of Science in Architectural Studies	
Suggested Arrangement of Courses	41
Minor and Certificate Programs	
Courses	
Red McCombs School of Business	
General Information	51
Admission and Registration	
Academic Policies and Procedures	
Graduation	
Degrees and Programs	56
Bachelor of Business Administration	
Accounting	58
Accounting Suggested Arrangement of Courses	59
Business Honors Program	59
Business Honors Program Suggested Arrangement of	
Courses	
Finance	
Finance Suggested Arrangement of Courses	
International Business	62
International Business Suggested Arrangement of Courses	63
Management	63
Management Suggested Arrangement of Courses	64
Management Information Systems	64
Management Information Systems Suggested Arrangement of Courses	64
Marketing	65
Marketing Suggested Arrangement of Courses	65
Science and Technology Management	65
Science and Technology Management Suggested Arrangement of Courses	66
Supply Chain Management	
Supply Chain Management Suggested Arrangement o	f
Courses	
Minor and Certificate Programs	
Courses	
Business Administration	
Department of Accounting	
Department of Finance	
Department of Business, Government and Society	
Department of Information, Risk, and Operations Management	
Department of Management	90

Department of Marketing	92	Ac
Moody College of Communication	96	Gra
General Information	96	De
Admission and Registration	97	
Academic Policies and Procedures	97	
Graduation	98	
Degrees and Programs	98	
Bachelor of Science in Advertising	99	
Bachelor of Science in Communication and Leadership	00	
Bachelor of Science in Communication Sciences and Disorder		
Bachelor of Science in Communication Studies 1		
Bachelor of Journalism 1		
Bachelor of Science in Public Relations 1		
Bachelor of Science in Radio-Television-Film 1		
Minor and Certificate Programs 1	07	
Courses 1		
Communication 1	16	
Communication and Leadership	19	
Department of Advertising 1	20	
Department of Communication Sciences and Disorders	27	
Department of Communication Studies	29	
School of Journalism 1	35	
Department of Radio-Television-Film	44	
College of Education 1	54	
General Information 1	54	
Admission and Registration	55	
Academic Policies and Procedures	55	Mi
Graduation 1	55	Со
Degrees and Programs	55	
Bachelor of Science in Applied Learning and Development 1	56	
Bachelor of Science in Athletic Training	58	
Bachelor of Science in Kinesiology and Health 1	59	
Minor and Certificate Programs 1	61	
Courses 1	61	
Applied Learning and Development 1	62	
Department of Curriculum and Instruction	63	
Department of Educational Psychology	66	
Department of Kinesiology and Health Education	68	
Science 1	79	
Special Education 1	80 <sup>Co</sup>	llege
Cockrell School of Engineering 1	82	Ge
General Information	82	Ad
Admission and Registration 1	85	Ac

Academic Policies and Procedures	187
Graduation	189
Degrees and Programs	190
Bachelor of Science in Aerospace Engineering	193
Suggested Arrangement of Courses	195
Bachelor of Science in Architectural Engineering	195
Suggested Arrangement of Courses	197
Bachelor of Science in Biomedical Engineering	198
Suggested Arrangement of Courses	202
Bachelor of Science in Chemical Engineering	203
Suggested Arrangement of Courses	206
Bachelor of Science in Civil Engineering	206
Suggested Arrangement of Courses	208
Bachelor of Science in Computational Engineering	209
Suggested Arrangement of Courses	210
Bachelor of Science in Electrical Engineering	211
Suggested arrangement of courses: Computer and Electr Engineering	
Bachelor of Science in Environmental Engineering	216
Suggested Arrangement of Courses	218
Bachelor of Science in Geosystems Engineering and Hydrogeology	219
Suggested Arrangement of Courses	
Bachelor of Science in Mechanical Engineering	
Suggested Arrangement of Courses	
Bachelor of Science in Petroleum Engineering	223
Suggested Arrangement of Courses	225
Minor and Certificate Programs	
Courses	228
Engineering Studies	229
General Engineering	230
Department of Aerospace Engineering and Engineering Mechanics	
Department of Biomedical Engineering	236
Department of Chemical Engineering	241
Department of Civil, Architectural, and Environmental Engineering	244
Department of Electrical and Computer Engineering	249
Department of Mechanical Engineering	
Hildebrand Department of Petroleum and Geosystems Engineering	
College of Fine Arts	
General Information	
Admission and Registration	
Academic Policies and Procedures	

Graduation	276
Degrees and Programs	277
Bachelor of Fine Arts	280
Bachelor of Music	283
Bachelor of Arts	286
Bachelor of Arts in Theatre and Dance	287
Bachelor of Arts in Music	288
Bachelor of Science in Arts and Entertainment Technologies	
Minor and Certificate Programs	289
Courses	
Department of Art and Art History	290
Department of Theatre and Dance	301
Fine Arts	
Sarah and Ernest Butler School of Music	312
School of Design and Creative Technologies	324
John A. and Katherine G. Jackson School of Geosciences	333
General Information	333
Admission and Registration	334
Academic Policies and Procedures	335
Graduation	336
Degrees and Programs	337
Bachelor of Arts in Geological Sciences	338
Bachelor of Science in Environmental Science	340
Bachelor of Science in Geological Sciences	342
Option I: General Geology	342
Option II: Geophysics	343
Option III: Hydrogeology	344
Option V: Teaching	345
Bachelor of Science in Geosystems Engineering and	
Hydrogeology	
Minor and Certificate Programs	
Courses	
School of Information	
General Information	
Minor and Certificate Programs	358
Courses	359
College of Liberal Arts	361
General Information	361
Admission and Registration	362
Academic Policies and Procedures	363
Graduation	370
Degrees and Programs	370
Bachelor of Arts, Plan I	372

African and African Diaspora Studies	375
American Studies	375
Anthropology	375
Asian American Studies	375
Asian Cultures and Languages	375
Asian Studies	376
Classical Languages	376
Classical Studies	377
Economics	377
English	377
Ethnic Studies	377
European Studies	377
French Studies	378
Geography	378
German	379
German, Scandinavian, and Dutch Studies	379
Government	379
Health and Society	380
History	380
Human Dimensions of Organizations	380
Humanities	380
Iberian and Latin American Languages and Cultures	381
International Relations and Global Studies	381
Islamic Studies	381
Italian Studies	381
Jewish Studies	382
Latin American Studies	382
Linguistics	382
Mexican American and Latina/o Studies	382
Middle Eastern Languages and Cultures	382
Middle Eastern Studies	
Philosophy	
Psychology	
Religious Studies	
Rhetoric and Writing	
Russian, East European, and Eurasian Studies	
Sociology	
Sustainability Studies	
Urban Studies	
Women's and Gender Studies	
Bachelor of Arts, Plan II	
Bachelor of Science in Environmental Science	
Bachelor of Science in Psychology	
Minor and Certificate Programs	
······································	

Courses		404
Liberal Arts		404
Liberal Arts Honors		406
Department of African an	d African Diaspora Studies	408
Department of American	Studies	419
Department of Anthropol	оду	425
Department of Asian Stu	dies	433
Department of Classics .		448
Cognitive Science		456
Comparative Literature		456
	for the Study of Core Texts and Idea	
	for Cultural Studies	
	S	
	n Studies	
	lies	
	d Italian	
	y and the Environment	
	Studies	
	nt	
	am	
Department of History		517
Human Dimensions Of O	ganizations	533
Humanities Program		534
International Relations ar	nd Global Studies Program	535
Schusterman Center for .	Jewish Studies	535
Teresa Lozano Long Insti	tute of Latin American Studies	539
Department of Linguistic	S	548
Department of Mexican A	merican and Latina/o Studies	551
Center for Middle Easterr	n Studies	554
Department of Middle Ea	stern Studies	560
Department of Philosoph	у	570
Plan II Honors Program .		574
Department of Psycholog	JY	575
Department of Religious	Studies	585
Department of Rhetoric a	nd Writing	595
Department of Air Force	Science	598
Department of Military So	cience	598
Department of Naval Scie	ence	599
Center for Russian, East I	European, and Eurasian Studies	600
Department of Slavic and	Eurasian Studies	604
Department of Sociology		608
Department of Spanish a	nd Portuguese	616

UTeach-Liberal Arts	625
Center for Women's and Gender Studies	626
College of Natural Sciences	639
General Information	639
Admission and Registration	640
Academic Policies and Procedures	644
Graduation	648
Degrees and Programs	649
Bachelor of Arts, Plan I	650
Astronomy	652
Chemistry	652
Computer Science	652
Mathematics	653
Physics	653
Bachelor of Science and Arts	654
Astronomy	655
Biochemistry	655
Biology	655
Chemistry	655
Computer Science	656
Human Development and Family Sciences	656
Human Ecology	656
Mathematics	656
Neuroscience	656
Nutrition	657
Physics	657
Bachelor of Science in Astronomy	657
Bachelor of Science in Biochemistry	658
Bachelor of Science in Biology	659
Bachelor of Science in Chemistry	662
Bachelor of Science in Computer Science	665
Bachelor of Science in Environmental Science	668
Bachelor of Science in Human Development and Family Sciences	670
Bachelor of Science in Mathematics	672
Bachelor of Science in Medical Laboratory Science	674
Bachelor of Science in Neuroscience	675
Bachelor of Science in Nutrition	676
Bachelor of Science in Physics	679
Bachelor of Science in Public Health	682
Bachelor of Science in Textiles and Apparel	683
Minor and Certificate Programs	685
Courses	694
Natural Sciences	694

Department of Astronomy	696
Biology	699
Department of Chemistry	705
Department of Computer Science	710
School of Human Ecology	716
Department of Marine Science	727
Department of Mathematics	730
Department of Molecular Biosciences	736
Neuroscience Program	737
Department of Physics	739
Division of Statistics and Data Sciences	743
UTeach-Natural Sciences	746
School of Nursing	747
General Information	747
Admission and Registration	748
Academic Policies and Procedures	749
Graduation	751
Degrees and Programs	752
Bachelor of Science in Nursing	752
Courses	753
College of Pharmacy	757
General Information	757
Admission and Registration	761
Academic Policies and Procedures	764
Graduation	766
Degrees and Programs	766
Preprofessional and Professional Coursework	768
Courses	768
Lyndon B. Johnson School of Public Affairs	781
General Information and Courses	781
Steve Hicks School of Social Work	782
General Information	782
Admission and Registration	784
Academic Policies and Procedures	785
Graduation	786
Degrees and Programs	786
Bachelor of Social Work	787
Minor and Certificate Programs	789
Courses	790
Appendix A: Texas Common Course Numbering System	793
Appendix B: Course Abbreviations	797
Faculty	800
School of Architecture Faculty	800
Red McCombs School of Business Faculty	802

College of Communication Faculty 81	10
College of Education Faculty 81	16
Cockrell School of Engineering Faculty 82	23
College of Fine Arts Faculty 83	38
John A. and Katherine G. Jackson School of Geosciences Faculty	
	46
School of Information Faculty 84	49
College of Liberal Arts Faculty 85	51
College of Natural Sciences Faculty 88	34
School of Nursing Faculty 90	70
College of Pharmacy Faculty 90	)9
Lyndon B. Johnson School of Public Affairs Faculty	17
Steve Hicks School of Social Work Faculty 91	19
Index	23

# Introduction

The benefits of education and of useful knowledge, generally diffused through a community, are essential to the preservation of a free government. **Sam Houston** 

Cultivated mind is the guardian genius of Democracy, and while guided and controlled by virtue, the noblest attribute of man. It is the only dictator that freemen acknowledge, and the only security which freemen desire. Mirabeau B. Lamar

*Where liberty has arisen, learning must be cherished—or liberty itself becomes a fragile thing.* **Lyndon B. Johnson** 

## Mission

The mission of The University of Texas at Austin is to achieve excellence in the interrelated areas of undergraduate education, graduate education, research, and public service.

The University provides superior and comprehensive educational opportunities at the baccalaureate through doctoral and special professional educational levels. It contributes to the advancement of society through research, creative activity, scholarly inquiry, and the development and dissemination of new knowledge, including the commercialization of University discoveries. The University preserves and promotes the arts, benefits the state's economy, serves the citizens through public programs, and provides other public service.

## **Student Honor Code**

As a student of The University of Texas at Austin, I shall abide by the core values of the University and uphold academic integrity.

## **University Code of Conduct**

The core values of The University of Texas at Austin are learning, discovery, freedom, leadership, individual opportunity, and responsibility. Each member of the University is expected to uphold these values through integrity, honesty, trust, fairness, and respect toward peers and community.

## Officers of the Administration

## The University of Texas at Austin

Gregory L. Fenves, PhD, President Maurie D. McInnis, PhD, Executive Vice President and Provost Darrell L. Bazzell, BA, Senior Vice President and Chief Financial Officer Scott Rabenold, MBA, Vice President for Development Leonard N. Moore, PhD. Vice President for Diversity and Community Engagement Patricia C. Ohlendorf, JD, Vice President for Legal Affairs S. Claiborne Johnston, MD, PhD, Vice President for Medical Affairs and Dean, Dell Medical School Daniel T. Jaffe, PhD, Vice President for Research Soncia Reagins-Lilly, EdD, Vice President for Student Affairs and Dean of Students Chris Sedore, Vice President and Chief Information Officer Christopher M. Del Conte. MEd. Vice President and Athletics Director Christine A. Plonsky, BS, Women's Athletics Director and Executive Senior Associate Athletics Director Nancy A. Brazzil, BS, Deputy to the President Jay Dyer, Deputy to the President for Governmental Relations Harrison Keller, PhD, Deputy to the President for Strategy and Policy Carlos E. Martinez, JD, Chief of Staff Gary J. Susswein, Chief Communications Officer

#### Administrative Officers of the Colleges and Schools

Mark J.T. Smith, PhD, Senior Vice Provost for Academic Affairs and Dean, Graduate School D. Michelle Addington, PhD, Dean, School of Architecture Jay Hartzell, PhD, Dean, Red McCombs School of Business Jay M. Bernhardt, PhD, Dean, Moody College of Communication Sherry Field, PhD, Interim Dean, College of Education Sharon L. Wood, PhD, PE, Dean, Cockrell School of Engineering Douglas Dempster, PhD, Dean, College of Fine Arts Sharon Mosher, PhD, Dean, John A. and Katherine G. Jackson School of Geosciences Eric T. Meyer, PhD, Dean, School of Information Ward Farnsworth, JD, Dean, School of Law Randy L. Diehl, PhD, Dean, College of Liberal Arts S. Claiborne Johnston, MD, PhD, Vice President for Medical Affairs and Dean, Dell Medical School Paul Goldbard, PhD, Dean, College of Natural Sciences Alexa K. Stuifbergen, PhD, RN, FAAN, Dean, School of Nursing M. Lynn Crismon, PharmD, Dean, College of Pharmacy Angela Evans, MA, Dean, Lyndon B. Johnson School of Public Affairs Luis H. Zayas, PhD, Dean, School of Social Work Brent L. Iverson, PhD, Dean, School of Undergraduate Studies

## The University of Texas System

Larry R. Faulkner, PhD, Chancellor ad interim David E. Daniel, Deputy Chancellor Steven W. Leslie, PhD, Executive Vice Chancellor for Academic Affairs Scott C. Kelley, EdD, Executive Vice Chancellor for Business Affairs Raymond S. Greenberg, MD, PhD, Executive Vice Chancellor for Health Affairs Daniel Sharphorn, JD, Vice Chancellor and General Counsel Barry McBee, JD, Vice Chancellor and Chief Governmental Relations Officer Randa S. Safady, PhD, Vice Chancellor for External Relations Amy Shaw Thomas, JD, Vice Chancellor and Counsel for Health Affairs William H. Shute, JD, Vice Chancellor for Federal Relations Stephanie A. Huie, PhD, Vice Chancellor for Strategic Initiatives David Lakey, MD, Vice Chancellor for Health Affairs and Chief Medical Officer

## **Board of Regents**

#### Officers

Sara Martinez Tucker, Chairman Jeffery D. Hildebrand, Vice Chairman Paul L. Foster, Vice Chairman Francie A. Frederick, General Counsel to the Board of Regents

#### Members

#### Terms scheduled to expire February 1, 2019

Jeffery D. Hildebrand, Houston Paul L. Foster, El Paso Ernest Aliseda. McAllen

#### Terms scheduled to expire February 1, 2021

Sara Martinez Tucker, Dallas David J. Beck, Houston **R.Steven Hicks. Austin** 

#### Terms scheduled to expire February 1, 2023

Kevin P. Eltife, Tyler Janice M. Longoria, Houston James C. "Rad" Weaver, San Antonio

#### Student regent with term to expire May 31, 2019

Brittany E. Jewell, The University of Texas Health Science Center at Houston

Each Regent's term expires when a successor has been appointed and qualified and has taken the oath of office. The Student Regent serves a one-year term.

## **Directory of Offices**

The following list includes some University offices of general interest. A complete directory of offices on campus is published at https:// www.utexas.edu/offices.

#### Academic Calendar

The academic calendar is published in General Information and at http:// The University of Texas at Austin, Office of the Registrar, PO Box 7216, registrar.utexas.edu/calendars Austin TX 78713-7216

Admission	
Admissions Visitor Center, Walter Webb Hall, (512) 471-1000 http:// admissions.utexas.edu	The University of Texas at Austin, Undergraduate Admissions Center, PO Box 8058, Austin TX 78713-8058
Catalogs and Course Schedules	
Catalogs and Course Schedules are published at the registrar's website, http://registrar.utexas.edu	
Housing	
Residence halls: (512) 471-3136, fax (512) 475-6532, e-mail housing@austin.utexas.edu; University apartments: (512) 232-5299, fax (512) 232-5353, e-mail uhd.apartments@austin.utexas.edu; http:// housing.utexas.edu	The University of Texas at Austin, University Housing and Dining, PO Box 7666, Austin TX 78713-7666
International Students	
International Office, 2400 Nueces Street Suite B, (512) 471-1211; http://world.utexas.edu	The University of Texas at Austin, The International Office, PO Box A, Austin TX 78713-8901, USA
Medical Services	
University Health Services, Student Services Building, 100 West Dean Keeton Street, (512) 471-4955; 24/7 Nurse Advice Line (512) 475-6877; http://healthyhorns.utexas.edu	The University of Texas at Austin, University Health Services, PO Box 7339, Austin TX 78713-7339
Orientation	
New Student Services, Student Services Building 3.410, (512) 471-3304, fax (512) 232-8211, e-mail nss@austin.utexas.edu; http:// orientation.utexas.edu	The University of Texas at Austin, New Student Services, 100 West Dean Keeton Street, Austin TX 78712-1100
Placement Tests	
Student Testing Services, Red McCombs School of Business, GSB 2.130, (512) 232-2662, e-mail ctl-testing@utlists.utexas.edu; https:// testingservices.utexas.edu/sts	
Registration Information	
Registration, MAI 1, (512) 475-7656, fax (512) 475-7515, e-mail registration@austin.utexas.edu; http://registrar.utexas.edu/students/ registration	The University of Texas at Austin, Office of the Registrar, Registration, PO Box 7216, Austin TX 78713-7216
Services for Students with Disabilities	
Services for Students with Disabilities, Student Services Building 4.206, (512) 471-6259, video phone (512) 410-6445, fax (512) 475-7730, e-mail ssd@austin.utexas.edu; http://diversity.utexas.edu/disability/	The University of Texas at Austin, Services for Students with Disabilities, 100 West Dean Keeton Street, Student Services Building 4.206, Austin TX 78712-1100
Transcripts	
Office of the Registrar, MAI 1, (512) 475-7689, fax (512) 475-7515, e-mail transcripts@austin.utexas.edu; http://registrar.utexas.edu/students/ transcripts	The University of Texas at Austin, Office of the Registrar, Transcript Services, PO Box 7216, Austin TX 78713-7216
TSI	
Texas Success Initiative, Buford H. Jester Center A332, (512) 232-7146, fa	x The University of Texas at Austin, Texas Success Initiative, JES A332, 201

(512) 475-6838, e-mail tsi@austin.utexas.edu; https://ugs.utexas.edu/tsi E. 21st St. Austin TX 78705

## Statement on Equal Educational Opportunity

The University of Texas at Austin is committed to an educational and working environment that provides equal opportunity to all members of the University community. In accordance with federal and state law, the University prohibits unlawful discrimination, including harassment, on the basis of race; color; religion; national origin; gender, including sexual harassment; age; disability; citizenship; and veteran status. Discrimination on the basis of sexual orientation, gender identity, and gender expression is also prohibited pursuant to University policy. Any member of the University community who feels they have been subject to discrimination, harassment, or retaliation should contact the Office for Inclusion and Equity in person at SSB 3.212, Austin TX 78712; via e-mail at equity@utexas.edu; or by phone at (512) 471-1849.

## Accreditation

The University of Texas at Austin is accredited by the Southern Association of Colleges and Schools Commission on Colleges (http:// www.sacscoc.org) to award baccalaureate, masters, and doctoral degrees. Contact the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of The University of Texas at Austin.

## The University of Texas at Austin

The University of Texas was established by the state legislature in 1881; by popular vote, the main University was located at Austin and the Medical Branch at Galveston. The Austin campus was opened in September, 1883, with a faculty of eight and a student body of 218; about three-quarters of the students were registered in the Academic Department and the remainder in the Law Department. In the intervening decades, the central campus has grown from forty to more than 360 acres, while the student body has increased to about 39,000 undergraduates and 11,000 graduate students. In 1967, with the creation of The University of Texas System, the name of the main University was changed to The University of Texas at Austin.

University students represent both the diverse population of the state and the full range of contemporary scholarship: an undergraduate may choose courses from more than 200 fields of study while pursuing any of more than 150 majors. Undergraduate study is supported by extensive computer facilities and by one of the largest academic libraries in the nation. Students also benefit from the broad range of scholarly and technical research conducted by the faculty and the research staff.

The city of Austin, with a population of about 1.8 million, is a relaxed and cosmopolitan setting for the University. The city is home to respected professional communities in theatre, dance, the visual arts, and classical and popular music that offer a wide range of cultural events. Students may also take part in recreational activities made possible by the temperate climate and Austin's location in the Hill Country of central Texas.

For further historical and current information about the University, see *General Information* (http://catalog.utexas.edu/general-information).

## The University of Texas System

The University of Texas at Austin is the largest component of The University of Texas System. The system is governed by a nine-member Board of Regents appointed by the governor with the advice and consent of the state Senate. In addition to the University, the system consists of the following institutions. Information about the system and its components is published at http://www.utsystem.edu/.

- The University of Texas at Arlington
- The University of Texas at Dallas
- The University of Texas at El Paso
- · The University of Texas of the Permian Basin
- The University of Texas Rio Grande Valley
- The University of Texas at San Antonio
- The University of Texas at Tyler
- The University of Texas Southwestern Medical Center at Dallas
- The University of Texas Medical Branch at Galveston
- The University of Texas Health Science Center at Houston
- The University of Texas Health Science Center at San Antonio
- The University of Texas M. D. Anderson Cancer Center
- · The University of Texas Health Science Center at Tyler

## **Organization of the University**

## **Academic Affairs**

Subject to the supervision of the Board of Regents and to the authority the board has vested in administrative officers, the general faculty is responsible for the governance of the University. The president is the chief executive officer; the executive vice president and provost is the chief academic officer. The administration of each college or school is the responsibility of that division's dean; in most colleges and schools, an associate or assistant dean for academic affairs oversees the day-to-day academic life of the division. Several colleges are further divided into departments and academic centers; academic and administrative matters in these units are the responsibility of the department chair or center director. A list of the University's colleges and schools and their constituent departments and academic centers is given in *General Information* (http://catalog.utexas.edu/general-information/the-university/organization-of-the-universitys-academic-units).

## **Student Services**

Student services are provided by the Division of Student Affairs, under the direction of the vice president for student affairs. The division consists of several units, which administer the University's programs in such areas as financial aid, student record management, counseling and learning support, housing and food, recreation, health services, and student media. The services of these units are described in *General Information* (http://catalog.utexas.edu/general-information/studentservices). Services provided by the colleges and schools are described in the college/school sections of this catalog.

## **Undergraduate Degrees**

The University offers the following undergraduate degrees.

Bachelor of Architecture	BArch
Bachelor of Arts	BA
Bachelor of Arts in Geological Sciences	BAGeoSci
Bachelor of Arts in Music	BAMusic
Bachelor of Arts in Theatre and Dance	BATD
Bachelor of Business Administration	BBA
Bachelor of Fine Arts	BFA
Bachelor of Journalism	BJ
Bachelor of Music	BMusic

Bachelor of Science and Arts	BSA
Bachelor of Science in Arts and Entertainment Technologies	BSAET
Bachelor of Science in Advertising	BSAdv
Bachelor of Science in Aerospace Engineering	BSAsE
Bachelor of Science in Applied Learning and Development	BSALD
Bachelor of Science in Architectural Engineering	BSArchE
Bachelor of Science in Architectural Studies	BSArchStds
Bachelor of Science in Astronomy	BSAst
Bachelor of Science in Athletic Training	BSAthlTrng
Bachelor of Science in Biochemistry	BSBioch
Bachelor of Science in Biology	BSBio
Bachelor of Science in Biomedical Engineering	BSBiomedE
Bachelor of Science in Chemical Engineering	BSChE
Bachelor of Science in Chemistry	BSCh
Bachelor of Science in Civil Engineering	BSCE
Bachelor of Science in Communication and Leadership	BSCommLead
Bachelor of Science in Communication Sciences and Disorders	BSCSD
Bachelor of Science in Communication Studies	BSCommStds
Bachelor of Science in Computational Engineering	BSCompE
Bachelor of Science in Computer Science	BSCS
Bachelor of Science in Electrical Engineering	BSEE
Bachelor of Science in Environmental Engineering	BSEnvE
Bachelor of Science in Environmental Science	BSEnviroSci
Bachelor of Science in Geological Sciences	BSGeoSci
Bachelor of Science in Geosystems Engineering and Hydrogeology	BSGEH
Bachelor of Science in Human Development and Family Sciences	BSHDFS
Bachelor of Science in Interior Design	BSID
Bachelor of Science in Kinesiology and Health	BSKinHealth
Bachelor of Science in Mathematics	BSMath
Bachelor of Science in Mechanical Engineering	BSME
Bachelor of Science in Medical Laboratory Science	BSMedLabSci
Bachelor of Science in Neuroscience	BSNeurosci
Bachelor of Science in Nursing	BSN
Bachelor of Science in Nutrition	BSNtr
Bachelor of Science in Petroleum Engineering	BSPE
Bachelor of Science in Physics	BSPhy
Bachelor of Science in Psychology	BSPsy
Bachelor of Science in Public Health	BSPublicHealth
Bachelor of Science in Public Relations	BSPR
Bachelor of Science in Radio-Television-Film	BSRTF
Bachelor of Science in Textiles and Apparel	BSTA
Bachelor of Social Work	BSW
Doctor of Pharmacy	PharmD

## Degree Programs SCHOOL OF ARCHITECTURE

Architectural studies	BSArchStds
Architecture	BArch
Interior design	BSID

## **RED MCCOMBS SCHOOL OF BUSINESS**

Business honors program	BBA		
Department of Accounting			
Accounting	BBA		
Integrated approach	BBA and MPA		
Department of Finance			
Finance	BBA		
Department of Information, Risk, and Operations Management			
Management information systems	BBA		
Science and technology management	BBA		
Supply chain management	BBA		
Department of Management			
Management	BBA		
Department of Marketing			
International business	BBA		
Marketing	BBA		

## MOODY COLLEGE OF COMMUNICATION

#### Department of Advertising

Advertising	BSAdv
Public relations	BSPR
Department of Communication Sciences and Disorders	
Communication sciences and disorders	BSCSD
Department of Communication Studies	
Communication and leadership	BSCommLead
Communication studies	BSCommStds
School of Journalism	
Journalism	BJ
Department of Radio-Television-Film	
Radio-television-film	BSRTF

## **COLLEGE OF EDUCATION**

Early childhood through grade six ESL generalist	BSALD
All-level generic special education	BSALD
Youth and community studies	BSALD
Department of Kinesiology and Health Education	
Applied movement science	BSKinHealth
Athletic training	BSAthlTng
Exercise science	BSKinHealth
Health promotion and behavioral science	BSKinHealth
Physical culture and sports	BSKinHealth
Sport management	BSKinHealth

## COCKRELL SCHOOL OF ENGINEERING

#### Department of Aerospace Engineering and Engineering Mechanics

Aerospace engineering	BSAsE
Computational engineering	BSCompE
Department of Biomedical Engineering	
Biomedical engineering	BSBiomedE
Integrated approach	BSBME and MSE
Department of Chemical Engineering	
Chemical engineering	BSChE
Department of Civil, Architectural, and	
Environmental Engineering	
Architectural engineering	BSArchE
Environmental engineering	BSEnvE
Civil engineering	BSCE
Department of Electrical and Computer	
Engineering	
Electrical engineering	BSEE
Integrated Approach	BSEE and MSE
Department of Mechanical Engineering	
Mechanical engineering	BSME
Integrated approach	BSME and MSE
Hildebrand Department of Petroleum Engineering	
Petroleum engineering	BSPE
Geosystems engineering and hydrogeology (offered jointly by the Hildebrand Department of Petroleum and Geosystems Engineering and the Jackson School of Geosciences)	BSGEH

## **COLLEGE OF FINE ARTS**

#### Department of Art and Art History

Art history	BA
Studio art	BA, BFA
Visual art studies	BFA
School of Design and Creative Technologies	
Arts and entertainment technologies	BSAET
Design	BA, BFA
Sarah and Ernest Butler School of Music	
Composition	BMusic
Jazz (emphasis in composition or performance: double bass, drum set, guitar, piano, saxophone, trombone, and trumpet)	BMusic
Music	BAMusic
Music Composition	BAMusic
Music studies	BMusic
Performance (Students may major in voice, piano, organ, harpsichord, harp, or one of the orchestral instruments, including euphonium, guitar, and saxophone)	BMusic
Department of Theatre and Dance	
Acting	BFA
Dance	BFA
Theatre and dance	BATD
Theatre studies	BFA

## JOHN A. AND KATHERINE G. JACKSON SCHOOL OF GEOSIENCES

#### **Department of Geological Sciences** Geological sciences BAGeoSci, **BSEnviroSci Geological Sciences** BSGeoSci Option I: General geology **Option II: Geophysics** BSGeoSci Option III: Hydrogeology BSGeoSci **Option V: Teaching** BSGeoSci BSGEH Geosystems engineering and hydrogeology (offered jointly with the Cockrell School of Engineering)

## **COLLEGE OF LIBERAL ARTS**

Health and society	ВА
Human Dimensions of Organizations	BA
Humanities	BA
International relations and global studies	BA
Plan II	BA
Department of African and African Diaspora	
Studies	
African and African diaspora studies	BA
Department of American Studies	
American studies	BA
Department of Anthropology	
Anthropology	BA
Center for Asian American Studies	
Ethnic studies (Students majoring in ethnic studies concentrate in Asian American studies.)	BA
Department of Asian Studies	
Asian cultures and languages (Students specialize in Chinese, Hindi/Urdu, Japanese, Korean, Malayalam, Sanskrit, or Tamil.)	ВА
Asian studies	BA
Department of Classics	
Classical languages (Students specialize in classics, Greek, or Latin)	ВА
	ВА
classics, Greek, or Latin) Classical studies (Students specialize in ancient	
classics, Greek, or Latin) Classical studies (Students specialize in ancient history or classical archaeology)	
classics, Greek, or Latin) Classical studies (Students specialize in ancient history or classical archaeology) <b>Department of Economics</b>	ВА
classics, Greek, or Latin) Classical studies (Students specialize in ancient history or classical archaeology) <b>Department of Economics</b> Economics	ВА
classics, Greek, or Latin) Classical studies (Students specialize in ancient history or classical archaeology) Department of Economics Economics Department of English	BA
classics, Greek, or Latin) Classical studies (Students specialize in ancient history or classical archaeology) <b>Department of Economics</b> Economics <b>Department of English</b> English	BA
classics, Greek, or Latin) Classical studies (Students specialize in ancient history or classical archaeology) Department of Economics Economics Department of English English Center for European Studies	BA BA BA
classics, Greek, or Latin) Classical studies (Students specialize in ancient history or classical archaeology) <b>Department of Economics</b> Economics <b>Department of English</b> English <b>Center for European Studies</b> European studies	BA BA BA
classics, Greek, or Latin) Classical studies (Students specialize in ancient history or classical archaeology) Department of Economics Economics Department of English English Center for European Studies European studies Department of French and Italian	BA BA BA BA
classics, Greek, or Latin)Classical studies (Students specialize in ancient history or classical archaeology)Department of EconomicsEconomicsDepartment of EnglishEnglishCenter for European StudiesEuropean studiesPepartment of French and ItalianFrench studies	BA BA BA BA
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classics, Greek, or Latin)Classical studies (Students specialize in ancient history or classical archaeology)Department of EconomicsEconomicsDepartment of EnglishCenter for European StudiesEuropean studiesDepartment of French and ItalianFrench studiesItalian studiesDepartment of Geography and the Environment	BA BA BA BA BA BA BA
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classics, Greek, or Latin)Classical studies (Students specialize in ancient history or classical archaeology)Department of EconomicsEconomicsDepartment of EnglishEnglishCenter for European StudiesDepartment of French and ItalianFrench studiesItalian studiesDepartment of Geography and the EnvironmentGeographical sciencesGeographyUrban studies	BA BA BA BA BA BA BA BA BSEnviroSci BA

German, Scandinavian, and Dutch Studies	BA	Option IX: Biology honors	BSBio
Department of Government		Option X: Computational biology	BSBio
Government	BA	Option XI: Biology	BSBio
Department of History		Option XII: Genetics and genomics	BSBio
History	BA	Department of Chemistry	
Schusterman Center for Jewish Studies		Chemistry	BA, BSA
Jewish studies	BA	Chemistry	
Teresa Lozano Long Institute of Latin American		Option I: Chemistry	BSCh
Studies		Option II: Computation	BSCh
Latin American studies	BA	Option III: Teaching	BSCh
Department of Linguistics		Option IV: Chemistry honors	BSCh
Linguistics	BA	Department of Computer Science	
Department for Mexican American and Latina/o		Computer science	BA, BSA
Studies	D.4	Computer science	
Mexican American and Latina/o studies	BA	Option I: Computer science	BSCS
Center for Middle Eastern Studies	5.4	Option II: Turing scholars honors	BSCS
Middle Eastern studies	BA	Option III: Computer science honors	BSCS
Department of Middle Eastern Studies		Option IV: Integrated approach	BSCS and MSCS
Islamic stuides	BA	Option V: Teaching (senior grades)	BSCS
Middle Eastern languages and cultures	BA	School of Human Ecology	
Department of Philosophy		Human development and family sciences	BSA
Philosophy	BA	Human development and family sciences	
Department of Psychology		Option I: Early childhood	BSHDFS
Psychology	BA, BSPsy	Option II: Human development	BSHDFS
Department of Religious Studies	5.4	Option III: Families and personal relationships	BSHDFS
Religious studies	BA	Option IV: Families and society	BSHDFS
Department of Rhetoric and Writing		Option V: Human development and family	BSHDFS
Rhetoric and writing	BA	sciences honors	
Center for Russian, East European, and Eurasian Studies		Option VI: Honors in advanced human development and family sciences	BSHDFS
Russian, East European, and Eurasian studies	BA	Human ecology	BSA
Department of Sociology		Nutrition	BSA
Sociology	BA	Nutrition	
Department of Spanish and Portuguese		Option I: Dietetics	BSNtr
Iberian and Latin American languages and	BA	Option II: Nutritional sciences	BSNtr
cultures		Option III: Nutrition and public health	BSNtr
Center for Women's and Gender Studies		Option IV: Honors in advanced nutritional sciences	BSNtr
Women's and gender studies	BA	Option V: Nutrition honors	BSNtr
<b>COLLEGE OF NATURAL SCI</b>	INCES	Option VI: International nutrition	BSNtr
		Public health	
Department of Astronomy		Option I: Public health	BSPublicHealth
Astronomy	BA, BSA	Option II: Public health honors	BSPublicHealth
Astronomy		Option III: Advanced program	BSPublicHealth
Option I: Astronomy	BSAst	Textiles and apparel	
Option II: Astronomy Honors	BSAst	Option I: Apparel, functional, and technical design	BSTA
Biology Instruction Office		Option II: Merchandising and consumer sciences	BSTA
Biology	BSA	Option III: Textiles and apparel honors	BSTA
Biology		Option IV: Textile conservation and museum	BSTA
Option I: Ecology, evolution, and behavior	BSBio	studies	
Option II: Human biology	BSBio	Department of Integrative Biology	
Option III: Marine and freshwater science	BSBio	Biological sciences	
Option IV: Microbiology and infectious diseases	BSBio	Option I: Biological sciences	BSEnviroSci
	DOD'		

Option II: Biological sciences honors

Department of Mathematics

Mathematics

BSEnviroSci

BA, BSA

Option VII: Plant biology

Option VIII: Teaching

Option V: Cell and molecular biology

BSBio

BSBio

BSBio

Mathematics	
	DOMash
Option I: Actuarial science	BSMath
Option V: Teaching	BSMath
Option VI: Mathematics honors	BSMath
Option VII: Mathematics	BSMath
Department of Molecular Biosciences	
Biochemistry	BSA
Biochemistry	
Option I: Biochemistry	BSBioch
Option III: Biochemistry honors	BSBioch
Medical laboratory science	BSMedLabSci
Department of Neuroscience	
Neuroscience	BSA
Neuroscience	
Option I: Neuroscience scholars	BSNeurosci
Option II: Neuroscience honors	BSNeurosci
Option III: Neuroscience	BSNeurosci
Department of Physics	
Physics	BA, BSA
Physics	
Option I: Physics	BSPhy
Option II: Computation	BSPhy
Option III: Radiation physics	BSPhy
Option IV: Space sciences	BSPhy
Option V: Teaching	BSPhy
Option VI: Physics honors	BSPhy
Option VII: Biophysics	BSPhy

## SCHOOL OF NURSING

Nursing

BSN

#### **COLLEGE OF PHARMACY**

Pharmacy

PharmD

# STEVE HICKS SCHOOL OF SOCIAL WORK

Social work

BSW

## **Simultaneous Majors**

With proper approval, an undergraduate may pursue two majors simultaneously. The two majors may lead either to a single degree or to two degrees. For example, a student who majors simultaneously in history and government is awarded a single Bachelor of Arts degree; a student who majors simultaneously in journalism and government receives the Bachelor of Journalism and the Bachelor of Arts.

The student is admitted to the University with a single major. He or she may choose a second major after completing 30 semester hours of coursework in residence at the University. The student must follow any application procedures and meet any admission requirements that have been established for the second major; information about these and other relevant college policies is available from the dean. Approval of the student's application for simultaneous major will take into account the student's ability to graduate within four years<sup>1</sup> of entering the university.

Students with simultaneous majors must pay all applicable major-related fees for both fields, and they have the right to use the advising and

student services provided by both colleges. Decisions about admission to programs, honors, scholastic probation, and dismissal are based independently on the criteria for each major.

A student who chooses to pursue two majors simultaneously is expected to take responsibility for his or her educational development. The student must know and abide by all policies of each of the colleges in which he or she is enrolled. The student must also know and meet the requirements of both degree programs, enroll in courses appropriate to both, meet prerequisites and take courses in the proper sequence, and seek advice from both colleges about degree requirements and other University policies when necessary.

<sup>1</sup>For programs requiring more than four years, the projected length of the program will be used instead of the four-year standard.

## **Interdisciplinary Opportunities**

Several of the majors listed in the section "Degree Programs" are interdisciplinary in nature. The Bachelor of Science in Biomedical Engineering, for example, is offered by the Cockrell School of Engineering but involves substantial coursework in the life and physical sciences; in the various area studies programs in the College of Liberal Arts, such as Latin American studies and Middle Eastern studies, students examine a geographic area from the viewpoints of several traditional disciplines.

In addition to interdisciplinary majors, the simultaneous major option (p. 13), and the formal dual degree programs described later in this catalog, the University provides various ways for students to add breadth and diversity to their studies. These include the minor and transcriptrecognized certificate programs (p. 13); other concentrations, not reflected on the graduate's transcript, are described in the later chapters of this catalog. The Study Abroad program, described in *General Information* (http://catalog.utexas.edu/general-information/studentservices/international-office/#studyabroadtext), allows students to consider their own field from the unique viewpoint of another culture. The Bridging Disciplines Programs and other initiatives of the School of Undergraduate Studies help students traverse the traditional boundaries between colleges and disciplines.

Cross-disciplinary initiatives of the colleges and schools are often described on their websites, which may be reached via http://www.utexas.edu/academics/areas-of-study.

## **Minor and Certificate Programs**

#### Minor

The transcript-recognized undergraduate academic minor must be completed in conjunction with an undergraduate degree at The University of Texas at Austin; students pursuing an integrated undergraduate/graduate program must complete the requirements for the minor within one year after completing the undergraduate requirements of their program.

*Minors in all areas except foreign languages.* Transcript-recognized undergraduate minors require a minimum of 15 hours of coursework in the minor area, but may not require more than 18 hours. None of the specified coursework from the minor can include unnumbered topics courses. Minors must include a minimum of six hours of upper division coursework.

*Minors in foreign languages.* Transcript-recognized undergraduate minors in foreign languages require a minimum of 15 hours of coursework in the minor area, but may not require more than 21 hours. None of the specified coursework from the minor can include unnumbered topics courses. Minors must include a minimum of nine hours beyond first

year competence in the language, including at least three hours of upper division coursework.

At least half of the required course work in the minor must be completed in residence at The University of Texas at Austin.

A student may not earn a minor in the same field of study as his or her major, and at least nine of the hours required for the minor must include coursework not used to satisfy the requirements of the student's major. However, courses in the minor may fulfill other degree requirements such as general education requirements or required elective hours.

Transcript recognition is awarded at the time of undergraduate degree completion.

Each of the following transcript-recognized minor programs is described in the catalog section for the college that sponsors it.

#### School of Architecture (p. 41)

- · Architectural History Minor
- · Architectural Studies Minor
- Interior Design Minor
- · Landscape Studies Minor

#### McCombs School of Business (p. 67)

- · Accounting Minor
- Accounting Minor for Business Economics Option Program
- Business Minor
- Entrepreneurship Minor
- Finance Minor
- · Finance Minor for Business Economics Option Program
- Management Minor
- Management Information Systems Minor
- Marketing Minor
- Supply Chain Management Minor

#### Moody College of Communication (p. 107)

- Communication and Social Change Minor
- Communication Studies Minor
- Digital Media Minor
- Global Communication Minor
- Health Communication Minor
- Journalism Minor
- · Media and Entertainment Industries Minor
- · Media Studies Minor
- Science Communication Minor
- Sports Media Minor
- US Latino and Latin American Media Studies Minor
- Visual Media Minor

#### College of Education (p. 161)

- · Educational Psychology Minor
- Kinesiology and Health Education Minor

#### Cockrell School of Engineering (p. 225)

• Materials Science and Engineering Minor

College of Fine Arts (p. 289)

- Art History Minor
- · Arts Management and Administration Minor
- Minor in Studio Art

#### School of Information (p. 358)

· Information Studies Minor

#### College of Liberal Arts (p. 391)

- African and African Diaspora Studies Minor
- · American Sign Language Studies Minor
- · American Studies Minor
- Anthropology Minor
- Arabic Minor
- Archaeology Minor
- Asian American Studies Minor
- Asian Religions Minor
- Chinese Minor
- · Classical Studies Minor
- · Comparative Literature Minor
- · Core Texts and Ideas Minor
- · Cultural Anthropology Minor
- Economics Minor
- English Minor
- European Studies Minor
- · Evolutionary and Functional Anatomy Minor
- · French Studies Minor
- Geography Minor
- · German, Scandinavian, and Dutch Studies Minor
- Government Minor
- Greek Minor
- Hebrew Minor
- History Minor
- Iberian and Latin American Literatures, Cultures, and Linguistics
   Minor
- Islamic Studies Minor
- Italian Studies Minor
- Korean Minor
- · Language, Culture, and Communication Minor
- Latin Minor
- Lesbian, Gay, Bisexual, Transgender, and Queer/Sexualities Studies Minor
- Medieval Studies Minor
- · Mexican American and Latina/o Studies Minor
- · Middle Eastern Studies Minor
- Persian Minor
- Philosophy Minor
- Philosophy of Law Minor
- Philosophy of the Mind and Language Minor
- Portuguese Minor
- Primatology Minor
- Religious Studies Minor
- Rhetoric and Writing Minor
- Russian Minor
- · Russian, East European, and Eurasian Studies Minor
- · Slavic and Eurasian Languages Minor

- Sociology Minor
- Turkish Minor
- UTeach-Liberal Arts Minor
- Women's and Gender Studies Minor

School of Social Work (p. 789)

- Disability Studies Minor
- Social Work Minor

## Transcript-Recognized Certificate Programs

Transcript-recognized certificate programs offer interdisciplinary curricula that support and extend a student's major or curricula in a specific academic or technical field that support a student's educational goals. Undergraduates who complete certificate requirements in conjunction with their degree requirements or within one year after earning the degree receive recognition on the University transcript; students in integrated undergraduate/graduate programs must complete certificate requirements within one year after they complete their undergraduate degree requirements. A maximum of nine hours of certificate coursework may be taken after the student has earned the undergraduate degree. At least half of the required certificate coursework must be completed in residence at the University.

A student may not earn a certificate in the same field as his or her major, and at least one certificate course must be outside the requirements of the major. However, certificate courses outside the major may be counted toward other degree requirements.

Students should apply for the certificate when they apply for graduation or when they complete the certificate program, whichever is later. Transcript recognition is awarded at the end of that semester or summer session.

The above requirements do not apply to Extended Campus students who are not seeking a degree from The University of Texas at Austin. For Extended Campus students, all of the required course work in a certificate program must be University of Texas at Austin credit, unless otherwise specified for a specific program. Extended Campus students apply for transcript recognition at the time of certificate completion and transcript recognition is awarded at that time.

Not all transcript-recognized certificate programs are available to Extended Campus students. More information about certificate programs available through TEXAS Extended Campus (TEC), including related policies, is on the TEC website.

Each of the following transcript-recognized certificate programs is described in the catalog section for the college that sponsors it. Certificate programs that do not lead to transcript recognition are also described in the following sections of this catalog.

#### School of Undergraduate Studies (p. 24)

- · Children and Society Certificate
- · Conflict Resolution and Peace Studies Certificate
- Design Strategies Certificate
- Digital Arts and Media Certificate
- · Environment and Sustainability Certificate
- · Ethics and Leadership in Business Certificate
- Ethics and Leadership in Health Care Certificate
- · Ethics and Leadership in Law, Politics, and Government Certificate
- · Ethics and Leadership in the Technology and the Media Certificate

- Global Studies Certificate
- · Human Rights and Social Justice Certificate
- · Innovation, Creativity, and Entrepreneurship Certificate
- · Media, Culture, and Identities Certificate
- Museum Studies Certificate
- Public Policy Certificate
- · Social Entrepreneurship and Nonprofits Certificate
- Social Inequality, Health, and Policy Certificate

#### McCombs School of Business (p. 71)

- Business and Public Policy Certificate
- Business of Healthcare Certificate
- Energy Management Certificate
- Global Management Certificate
- Real Estate Certificate
- Risk Management Certificate

#### School of Engineering (p. 225)

- · Computational Science and Engineering Certificate
- Humanitarian Engineering Certificate
- National Academy of Engineering Grand Challenges Scholars
   Program Certificate

#### Jackson School of Geosciences (p. 347)

· Computational Science and Engineering Certificate

#### School of Information (p. 358)

• Digital Humanities Certificate

#### College of Liberal Arts (p. 399)

- · African Studies Certificate
- Business Spanish Certificate
- · Computational Science and Engineering Certificate
- · Core Texts and Ideas Certificate
- Creative Writing Certificate
- · Digital Humanities Certificate
- German Certificate
- · History and Philosophy of Science Certificate
- · Ibero-American Cultural Diversity Certificate
- Indigenous Studies Certificate
- Japanese Certificate
- Lesbian, Gay, Bisexual, Transgender, and Queer/Sexualities Studies Certificate
- · Security Studies Certificate
- · Spanish for Medical Professions Certificate

#### College of Natural Sciences (p. 685)

- Applied Statistical Modeling Certificate
- Computational Science and Engineering Certificate
- Elements of Computing Certificate
- Evidence and Inquiry Certificate
- Food and Society Certificate
- Forensic Science Certificate
- Marine Science Certificate
- Pre-Health Professions Certificate
- · Scientific Computation and Data Sciences Certificate

- · Textile Conservation and Museum Studies Certificate
- UTeach Natural Sciences Secondary Teaching Option Certificate
- UTeach Teacher Certification

School of Social Work (p. 789)

Public Safety Certificate

## Preparation for Health Professions

The rapid expansion and diversification of services designed to meet the health needs of society provide students with a variety of career opportunities in health care. Competition for admission to professional school programs is keen. It is important to explore and determine fitness for a health profession career path by becoming academically wellprepared and by participating in extra-curricular activities that develop knowledge of healthcare and the profession, leadership and collaboration with others, and community involvement.

#### **Advisory Services**

Students interested in health careers in dentistry, medicine, occupational therapy, optometry, pharmacy, physical therapy, physician assistant studies, and veterinary medical schools should contact the Health Professions Office, PAI 5.03, for career coaching designed to prepare them for admission to professional schools. The Health Professions Office (http://cns.utexas.edu/health-professions) maintains a website, including resource information on health careers. The HPO communicates with students via various social media platforms and their e-mail distribution list. The office sponsors a lecture series, an annual Health Professions Fair, and other programs.

In general, professional schools do not indicate a preferred undergraduate major, leaving the student free to choose a degree program suited to his or her interests and abilities. The student should complete at least the minimum professional school course requirements before taking a nationally standardized admission test such as the Dental Admission Test, Medical College Admission Test, Pharmacy College Admission Test, or Graduate Record Examinations. Health Professions Office provides information on courses that meet professional school admission requirements. Academic advisers in the student's major department provide guidance to incorporate pre-health professions courses into their degree plan.

# Completion of an Undergraduate Degree and Admission to Professional Schools

It is rare for a student to be admitted to graduate health professions schools without a bachelor's degree. A notable exception is that most professional pharmacy programs, including those in Texas, do not require a bachelor's degree for admission. However, many who are admitted to PharmD programs complete a bachelor's degree before starting Pharmacy school.

The Health Professions Office encourages students in all pre-health professions areas to complete a bachelor's degree in an area of interest that supports flexibility in career options.

## **Applying to Professional School**

The Health Professions Office provides a variety of application resources and tools to assist students in the application process.

All applicants to health professions programs should consult the schools' websites and catalogs, as well as the most recent online

editions of admissions guides such as ADEA Official Guide to Dental Schools, the AAMC Medical School Admission Requirements, the AAVMC Veterinary Medical School Admission Requirements, and the AACP Pharmacy School Admission Requirements.

## **Preparation for Law**

There is no sequential arrangement of courses prescribed for a pre-law program, nor is any particular major specified. For answers to specific questions about a pre-law program, the student should consult the prelaw adviser in his or her major department. Currently enrolled students of any major can see the pre-law adviser in the College of Liberal Arts in the Liberal Arts Career Services (LACS), Peter T. Flawn Academic Center 18. Services provided by the pre-law adviser include the annual fall law fair, information on how to research law schools, and assistance with the application procedure, including the personal statement and resume review. Additional information about preparation for law is available at https://liberalarts.utexas.edu/lacs/students/prelaw-gradschool/pre-law/overview.php.

Information about admission to The University of Texas at Austin School of Law is given in *General Information* (http://catalog.utexas.edu/generalinformation/admission/law-school-admission) and in the *Law School Catalog* (http://catalog.utexas.edu/law). Like most professional schools, the University's law school has a number of specific requirements and limitations. For example, the applicant must have completed a bachelor's degree. Each applicant for admission must take the Law School Admission Test, administered by the Law School Admission Council. This is usually taken by December of the senior year. The applicant's test score and undergraduate academic performance are important in determining eligibility for admission to law school; but all law schools consider a variety of factors in their admission policies, and no single factor by itself will guarantee admission or denial.

## Preparation for Teacher Certification

Students seeking certification to teach in Texas public schools for elementary (early childhood through grade six) must earn the Bachelor of Science in Applied Learning and Development in the College of Education and must meet the appropriate state certification requirements.

Students seeking certification to teach in Texas public schools for elementary (early childhood through grade six), middle school (grades four through eight), secondary (grades six through 12, seven through 12, and eight through 12), or all-level (early childhood through grade 12) must earn a bachelor's degree in the field they intend to teach and must meet the requirements for teacher certification. Students seeking teacher certification for either middle school or secondary math or science must follow the curriculum prescribed by the UTeach-Natural Sciences (p. 17) program. Students seeking teacher certification for middle school or secondary in English for language arts, social studies, or languages other than English must follow the curriculum prescribed by the UTeach-Urban Teachers (p. 17) or UTeach-Liberal Arts (p. 17) programs. Students seeking teacher certification for all-level in art, music, or theatre arts or secondary in dance must follow curriculum prescribed by the UTeach-Fine Arts (p. 17) program. Students seeking teacher certification for other areas should consult an adviser in the major department about degree requirements and a teacher certification adviser in the College of Education about certification requirements.

## Middle School, Secondary, and All-Level Teacher Certification

All teacher certification programs for middle school, secondary, and alllevel are based on degrees with academic majors in the student's chosen teaching field. Requirements for students seeking teacher certification for middle school, secondary, and all-level include all courses required for the student's major in the College of Education, College of Fine Arts, Jackson School of Geosciences, College of Liberal Arts, or the College of Natural Sciences, as well as the preprofessional and professional education courses.

#### **UTeach-Urban Teachers**

UTeach-Urban Teachers is a teacher preparation program for students seeking teacher certification for secondary in English or social studies. Information is available on the UTeach-Urban Teachers website (https:// education.utexas.edu/departments/curriculum-instruction/uteachurban-teachers) and from the College of Education advising office.

#### **UTeach-Fine Arts**

Program advising for students seeking teacher certification for all-level in art, music, and theatre arts or secondary in dance is provided in the College of Fine Arts. Information is available at https:// finearts.utexas.edu/students.

#### **UTeach-Liberal Arts**

UTeach-Liberal Arts is a professional teacher preparation program for liberal arts students pursuing academic majors in Arabic, Chinese, economics, English, French, history, geography, German, government, Japanese, Latin, Middle Eastern Studies, Russian, and Spanish. Students may seek certification to teach middle school or secondary.

UTeach-Liberal Arts offers a four-semester program for undergraduate students and a three-semester program for postbaccalaureate students. Admission into the program is required. Undergraduate students may enter the program as early as the second semester of their freshman year. More information about UTeach-Liberal Arts and the admission process is available at https://liberalarts.utexas.edu/uteach/.

#### **UTeach-Natural Sciences**

Students seeking teacher certification for middle school or secondary in mathematics, computer science, science, or engineering must follow the curriculum prescribed by the UTeach-Natural Sciences program, a collaborative partnership between the College of Education and the College of Natural Sciences. Program advising is housed in the College of Natural Sciences.

#### **Certification Requirements**

Information about legal requirements for certification to teach is available from the College of Education certification officer, George I. Sánchez Building 216, or from the Texas Education Agency. Application for the certificate should be made at the College of Education Certification Office, George I. Sánchez Building 216.

State of Texas teacher certification requirements are governed by the Texas Education Agency and are subject to change. Students must adhere to current teacher certification requirements, even if they differ from those listed in the University catalogs.

In accordance with state law, the commissioner of education may suspend or revoke a teaching certificate or refuse to issue a teaching certificate for a person who has been convicted of a felony or misdemeanor for a crime that directly relates to the duties and responsibilities of the teaching profession. Students who have completed all necessary academic requirements for teacher certification must also achieve a passing level of performance on the required state certification examinations and complete fingerprinting requirements. See State Board for Educator Certification (SBEC) at http://www.tea.texas.gov for details. In addition, students seeking bilingual education certification or certification to teach French or Spanish in elementary, middle school, or secondary must earn a passing score at the advanced level on the appropriate language test. Field observations and practical classroom teaching in community and school environments are required of all students seeking teacher certification. Accountability information for the teacher preparation program is given in *General Information* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/teacher-certification).

#### **Minimum Scholastic Requirements**

In addition to meeting the minimum coursework and scholastic requirements for the degree, students seeking teacher certification for middle school, secondary, and all-level must meet other requirements to take the prescribed work in professional development. Students seeking teacher certification must be approved by the College of Education for the Professional Development Sequence. Admission to the Professional Development Sequence (p. 17) is restricted; information about admission requirements is available in the College of Education, Office of the Dean, George I. Sánchez Building 216.

#### **Teaching Fields**

All teacher certification candidates for middle school, secondary, and all-level must earn a degree in their primary teaching field by meeting all of the requirements for the appropriate major. While completing these requirements, the student seeking teacher certification must take a core set of courses in the major that fulfill certification requirements. This certification core includes at least 24 semester hours in a single teaching field or 48 semester hours in a composite teaching field, and incorporates the state-specified essential knowledge and skills needed for successful teaching in the field. Often, the student's major department requires more than these 24 semester hours, but the certification core in the major field must be taken.

Students seeking teacher certification for middle school may choose from the following teaching fields:

- English language arts and reading
- social studies
- mathematics
- science

Students seeking teacher certification for secondary may choose from the following teaching fields:

- dance
- English language arts and reading
- history
- social studies
- computer science
- mathematics
- science

Students seeking teacher certification for all-level may choose from the following teaching fields:

- art
- languages other than English (Arabic, Chinese, French, German, Japanese, Latin, Russian, or Spanish)
- music

- physical education
- special education
- theatre arts

# Areas for Teacher Certification recommendation:

#### **College of Education**

- UTeach-Urban Teachers Program (p. 155)
- Bachelor of Science in Applied Learning and Development (p. 156)
- Bachelor of Science in Kinesiology and Health (p. 159)

#### **College of Fine Arts**

- UTeach-Fine Arts Program (p. 277)
- Bachelor of Fine Arts (p. 280)
- Bachelor of Music (p. 283)

#### **Jackson School of Geosciences**

• Bachelor of Science in Geological Sciences (p. 345)

#### **College of Liberal Arts**

- UTeach-Liberal Arts Programs (p. 370)
- UTeach-Liberal Arts Minor (p. 391)

#### **College of Natural Sciences**

- UTeach-Natural Sciences Program (p. 649)
- Bachelor of Science in Biology (p. 659)
- Bachelor of Science in Chemistry (p. 662)
- Bachelor of Science in Computer Science (p. 665)
- Bachelor of Science in Mathematics (p. 672)
- Bachelor of Science in Physics (p. 679)
- UTeach-Natural Sciences Certificate (p. 685)

#### **Education Career Services**

Candidates for teacher certification should register with Education Career Services at the beginning of their student-teaching semester. Education Career Services provides job placement services such as resume writing workshops and critiques, interview preparation workshops, individual mock interviews, school district panels, networking opportunities, and job fairs. Additional information is available on the Education Career Services website at https://education.utexas.edu/ about/college-offices/career-services.

## **Criminal History Acknowledgement**

As required by HB1508, teacher certification applicants need to be aware of the following:

- In order to earn a state of Texas teacher certification, you must pass a criminal history background check.
- If you have been convicted of an offense that is considered not appropriate for an educator, you could be ineligible to earn a teacher certification from the state of Texas.
- You may request a Preliminary Criminal History Evaluation from the Texas Education Agency. More information about the Preliminary Criminal History Evaluation is online at https://tea.texas.gov/Texas\_Educators/Investigations/ Preliminary\_Criminal\_History\_Evaluation-FAQs/.

# Coursework in the Graduate School and the School of Law

## Graduate Work for Undergraduate Credit

An undergraduate may enroll in a graduate course under the following conditions:

- 1. He or she must be an upper-division student and must fulfill the prerequisite for the course (except graduate standing).
- 2. He or she must have a University grade point average of at least 3.00.
- 3. He or she must receive the consent of the instructor of the course and of the graduate adviser for the field in which the course is offered. Some colleges and schools may also require the approval of the dean's office. Individual divisions may impose additional requirements or bar undergraduates from enrolling in graduate courses.
- 4. Students in most colleges must have their dean's approval before they register for a graduate course.

Undergraduate students may not enroll in graduate courses that have fewer than five graduate students enrolled.

A graduate course taken by an undergraduate is counted toward the student's bachelor's degree in the same way that upper-division courses are counted, unless the course is reserved for graduate credit as described in the next section. Courses reserved for graduate credit may not also be used to fulfill the requirements of an undergraduate degree.

An undergraduate student enrolled in a graduate course is subject to all University regulations affecting undergraduates.

# Reservation of Work by Undergraduates for Graduate Credit

Under the following conditions, a degree-seeking undergraduate may enroll in a graduate course and reserve that course for credit toward a graduate degree.

- 1. The student must have a University grade point average of at least 3.00.
- 2. The student must have completed at least 90 semester hours of coursework toward an undergraduate degree.
- 3. The student may not register for more than 15 semester hours in the semester or for more than 12 semester hours in the summer session in which the course is reserved.
- 4. No more than 12 semester hours may be reserved for graduate credit.
- 5. All courses reserved for graduate credit must be approved by the twelfth class day of the semester or the fourth class day of the summer session by the course instructor, the student's undergraduate adviser, the graduate adviser in the student's proposed graduate major area, the dean of the student's undergraduate college, and the graduate dean. A form for this purpose is available in the Office of Graduate Studies.

An undergraduate student enrolled in a graduate course is subject to all University regulations affecting undergraduates.

A student who reserves courses for graduate credit must be admitted to a University graduate program through regular channels before the credit may be applied toward a graduate degree. By allowing the student to earn graduate credit while still an undergraduate, the University makes no guarantee of the student's admissibility to any graduate program.

## Courses in the School of Law

Undergraduate students may not take courses in the School of Law.

## Honors

Honors programs and organizations are described in college/school sections of this catalog; the programs of the University Honors Center are described on the School of Undergraduate Studies (http:// ugs.utexas.edu/awards/societies) website. *General Information* (http:// catalog.utexas.edu/general-information/academic-policies-and-procedures/honors) gives the requirements for recognition as a College Scholar or Distinguished College Scholar, inclusion on the University Honors list, and graduation with University honors.

## **Academic Advising**

The University views sound academic advising as a significant responsibility in educating students. Academic advisers assist students in developing intellectual potential and exploring educational opportunities and life goals. Many people in the campus community contribute to the advising process, including faculty, staff, student, and professional advisers. Through the relationship established between adviser and student within a friendly, helpful, and professional atmosphere, a student has the opportunity to learn about educational options, degree requirements, and academic policies and procedures; to clarify educational objectives; to plan and pursue programs consistent with abilities, interests, and life goals; and to use all resources of the University to his or her best advantage.

Ultimately, the student is responsible for seeking adequate academic advice, for knowing and meeting degree requirements, and for enrolling in appropriate courses to ensure orderly and timely progress toward a degree. Frequent adviser contact provides students with current academic information and promotes progress toward educational goals. The University supports that progress and encourages effective academic advising campus-wide.

The advising systems are described in the college/school sections of this catalog.

## **Student Responsibility**

While University faculty and staff members give students academic advice and assistance, each student is expected to take responsibility for his or her education and personal development. The student must know and abide by the academic and disciplinary policies given in this catalog and in *General Information* (http://catalog.utexas.edu/generalinformation), including rules governing quantity of work, the standard of work required to continue in the University, scholastic probation and dismissal, and enforced withdrawal. The student must also know and meet the requirements of his or her degree program, including the University's basic education requirements; must enroll in courses appropriate to the program; must meet prerequisites and take courses in the proper sequence to ensure orderly and timely progress; and must seek advice about degree requirements and other University policies when necessary.

The student must give correct local and permanent postal addresses, telephone numbers, and e-mail address to the Office of the Registrar and to the offices of the student's deans and must notify these offices immediately of any changes. Official correspondence is sent to the postal or e-mail address last given to the registrar; if the student has failed to correct this address, he or she will not be relieved of responsibility on the grounds that the correspondence was not delivered.

The student must verify his or her schedule of classes each semester, must see that necessary corrections are made, and must keep documentation of all schedule changes and other transactions.

All students should be familiar with the following sources of information:

### The University Catalog

The catalog of the University is the document of authority for all students. Any academic unit may issue additional or more specific information that is consistent with approved policy. However, the information in the catalog supersedes that issued by any other unit if there is a conflict between the two. The University reserves the right to change the requirements given in the catalog at any time.

The catalog consists of five issues: the *Undergraduate Catalog* (http://catalog.utexas.edu/undergraduate), the *Graduate Catalog* (http://catalog.utexas.edu/graduate), the *Law School Catalog* (http://catalog.utexas.edu/law), the *Medical School Catalog*, and *General Information* (http://catalog.utexas.edu/general-information).

The Undergraduate Catalog is published in August of even-numbered years; the Graduate Catalog is published in August of odd-numbered years; the Law School Catalog is published in February of evennumbered years; the Medical School Catalog is published annually. These issues contain regulations and degree requirements that apply to undergraduate, graduate, School of Law, and School of Medicine students. Regulations are valid only for the academic years indicated by the dates in the title of each publication; for an explanation of the period for which degree requirements are valid, see the section "Graduation under a Particular Catalog" in each issue. The lists of available course offerings for each academic unit are correct at the time of publication but are subject to change. They are superseded by course offerings published each semester and summer session in the *Course Schedule*.

General Information, published every August, contains current and historical information about the University's organization and physical facilities. It gives important information about academic policies and procedures that apply to all students for the academic year indicated in title of the publication. It includes the official academic calendar, admission procedures and residence requirements, information about tuition and fees, and policies on quantity of work, grades and the grade point average, credit by examination and correspondence, adding and dropping courses, withdrawal from the University, and scholastic probation and dismissal. *General Information* is meant to be used along with each of the other issues; each student must be familiar with the regulations given there and with those given in the issue that covers his or her degree program.

Assistance in obtaining information about the University—including costs, refund policies, withdrawal, academic programs, the faculty, accreditation, and facilities and services for disabled persons—is available from Brenda Schumann, Interim Registrar, at (512) 475-7510 and at The University of Texas at Austin, Office of the Registrar, P O Box 7216, Austin TX 78713-7216.

#### The Course Schedule

The *Course Schedule* is published by the Office of the Registrar and is available before registration for each semester and summer session at http://registrar.utexas.edu/schedules/. It includes information about registration procedures; times, locations, instructors, prerequisites, and special fees of classes offered; and advising locations.

#### **Dean's Offices**

In each college, the office of the assistant or associate dean for student affairs serves as a central source of information about academic affairs

and student services. The student should consult the dean's office staff for information not provided in the publications listed above; a student who is in doubt about any University regulation should always seek clarification in the dean's office before proceeding.

## Graduation

The University holds commencement exercises at the end of the spring semester. Each college and school also holds a commencement ceremony in the spring, and many hold graduation exercises in the fall. Graduating students are encouraged to participate. Those who graduate in the summer or fall may attend commencement the following spring. Each student should consult his or her dean early in the semester of graduation for information about commencement activities and procedures.

No degree will be conferred except on publicly announced dates.

## **General Requirements**

To receive an undergraduate degree from The University of Texas at Austin, a student must fulfill the Core Curriculum (p. 23) requirements and all requirements for the degree as set forth in a catalog under which he or she is eligible to graduate and any special requirements of the college or school and department offering the degree, as well as the following minimum general requirements:

- 1. The student must have a grade point average of at least 2.00 on all courses undertaken at the University (including credit by examination, correspondence, and extension) for which a grade or symbol other than *Q*, *W*, *X*, or *CR* is recorded. Additional requirements imposed by a college or school, if any, are given in the college's section of this catalog.
- 2. The student must fulfill the following requirements regarding coursework taken in-residence. Residence credit includes only courses taken at The University of Texas at Austin; it does not include credit by examination, courses taken by extension or correspondence, and online courses that are recorded as transfer credit. Coursework in University-approved affiliated study abroad programs (international provider programs) is treated as residence credit for requirement 2a below. However, coursework in Universityapproved affiliated study abroad programs may not be used to fulfill requirement 2b.
  - a. The student must complete in-residence at least 60 semester hours of coursework counted toward the degree. (This requirement is waived for students in the Associate Degree in Nursing to Bachelor of Science in Nursing (ADNBSN), a degree program for registered nurses who hold associate's degrees or diplomas in nursing.)
  - b. At least six semester hours of advanced coursework in the major must be completed in residence.

Additional requirements imposed by a college or school, if any, are given in the college/school sections of this catalog. Many degree plans include residence rules in addition to the above University-wide requirements; the appropriate academic units have the discretion to determine applicability of Universityapproved affiliated study abroad credit toward all college- and school-specific requirements for coursework in-residence. Course equivalency and University approval of study abroad courses are determined by the appropriate academic units.

- 3. Coursework in American government and American history (the legislative requirement):
  - a. Each student must complete six semester hours of coursework in American government, including Texas government. Because these courses are not electives, they may not be taken on the pass/fail basis at the University. Credit by examination may be counted toward the requirement.

The six hours of coursework used to fulfill the requirement must cover both the United States and the Texas constitutions. Texas colleges and universities differ in the way they include this material in the courses they offer. As a result, some combinations of government courses taken at different institutions do not fulfill the requirement, even though they provide six hours of credit. The following combinations of coursework, some of which include transferred work, fulfill the government requirement at the University:

- i. Government 310L and 312L
- ii. Government 310L and three hours of transfer credit in United States government (entered into the student's University record as "GOV 3 US")
- iii. Government 310L and three hours of transfer credit in Texas government ("GOV 3 TX")
- iv. Three hours of transfer credit in United States government ("GOV 3 US") and three hours of transfer credit in Texas government ("GOV 3 TX")

A number of sections of Government 312L are offered each semester. Because some of these sections deal with state government and some deal with federal government, credit for Government 312L in combination with transfer credit in United States government ("GOV 3 US") or in Texas government ("GOV 3 TX") may fail to fulfill the legislative requirement. If a student has such a combination of credit, his or her dean's office will evaluate the coursework to determine whether both the state and the federal components of the requirement have been met.

b. Each student must complete six semester hours of coursework in American history. Up to three hours in Texas history may be counted toward this requirement. Because these courses are not electives, they may not be taken on the pass/fail basis at the University. Credit by examination may be counted toward the requirement.

ROTC courses may not be counted toward the legislative requirement in history or government. Policies about the use of ROTC courses are given in each of the college/school sections of this catalog.

4. A candidate for a degree must be registered at the University either in-residence or in absentia the semester or summer session the degree is to be awarded and must apply to the dean for the degree no later than the date specified in the official academic calendar. Some colleges require that their students be registered in that college the semester of graduation; these rules are given in the college/school sections of this catalog.

## **Multiple Degrees**

A student may not receive more than one degree with the same title.

# Graduation under a Particular Catalog

To receive a bachelor's degree, a student must fulfill all the degree requirements in a catalog under which he or she is eligible to graduate; the choices open to students in each college and school are explained below. The student must complete degree requirements within a specified time period; if he or she leaves school to enter military service during a national emergency, the time required to meet the military obligation is excluded from the time allowed for completion of the degree.

A student who transfers to the University from another Texas public institution of higher education has the same catalog choices that he or she would have had if the dates of attendance at the University had been the same as the dates of attendance at the other institution.

Since each college and school must retain the flexibility to improve its curriculum, course offerings may be changed during the student's education. If a course required under a previous catalog is no longer offered, students eligible to graduate according to that catalog should consult the dean of the college to learn whether another course may be used to fulfill the requirement.

## **Catalog Choices**

The catalog choices open to business, engineering, and pharmacy students are described below. In all other divisions, a student may graduate under the catalog covering any academic year in which he or she was enrolled at the University. Whichever catalog the student chooses, all degree requirements must be completed within six years (seven years for the Bachelor of Architecture) of the end of the two-year period covered by that catalog. For example, a student who chooses to graduate according to the requirements in the 2018-2020 catalog must do so by the end of the summer session 2026 (2027 for the Bachelor of Architecture).

#### **McCombs School of Business**

A business student may graduate under the catalog covering any academic year in which he or she was enrolled at the University. A business honors student who adds a second business major must graduate under the same catalog for both majors.

Whichever catalog the student chooses, all degree requirements must be completed within six years of the end of the two-year period covered by that catalog. For example, a student who chooses to graduate according to the requirements in the 2018-2020 catalog must do so by the end of the summer session 2026.

## **Cockrell School of Engineering**

An engineering student may graduate under the catalog covering any academic year in which he or she was enrolled in the school. Whichever catalog the student chooses, all degree requirements must be completed within six years of the end of the two-year period covered by that catalog. For example, a student who chooses to graduate according to the requirements in the 2018-2020 catalog must do so by the end of the summer session 2026.

Course substitutions in the degree program are permitted only with the approval of the departmental undergraduate adviser and the dean.

## **College of Pharmacy**

A pharmacy student may graduate under the catalog in effect immediately preceding the student's admission to the college or the

catalog covering any academic year in which he or she was enrolled in the professional curriculum in the college. Whichever catalog they choose, students must complete all degree requirements within seven years of the end of the two-year period covered by that catalog. For example, a student who chooses to graduate according to the requirements in the 2018-2020 catalog must do so by the end of the summer session 2026.

## School of Undergraduate Studies

Brent Iverson, PhD, *Dean* Lawrence D. Abraham, EdD, *Associate Dean* Jeanette M. Herman, PhD, *Assistant Dean, Academic Initiatives* http://ugs.utexas.edu/

## **General Information**

## Mission

The School of Undergraduate Studies oversees the components of a college education that are shared by all undergraduates at the University. The mission of the school includes responsibility for sustaining a dynamic common curriculum and enriching the undergraduate experience through innovative advising, career counseling, academic assistance, learning communities, interdisciplinary programs, and undergraduate research. The overall functions of the school are organized as follows:

## **Common Curriculum**

- To instill in each student the distinctive traits of a University of Texas at Austin graduate and broadly educated person.
- To ensure a high-quality core curriculum by working closely with the other colleges and schools to set and enforce standards for the courses required of all undergraduate students.
- · To develop and maintain innovative classes for first-year students.
- To set standards for and to evaluate courses that satisfy campuswide requirements in writing and speaking, ethics, global cultures, cultural diversity, quantitative reasoning, and independent inquiry.
- To assess and support ongoing curricular innovation and teaching excellence in these courses and throughout the undergraduate curriculum.

## **Strategic Advising & Career Counseling**

- To offer advising services that help students find coherent paths through the University that suit their academic and career interests, focusing on students who are unsure of their majors or who are considering a change.
- To provide training and resources for advisers from every college and school.
- To prepare students for graduate school or their careers with the workplace knowledge needed for making sound choices.

#### Academic Assistance

- To provide multiple avenues by which students can develop the ability to succeed academically.
- To help students improve performance inside and outside traditional classrooms.

## Learning Communities

- To support student success by cultivating community-based academic experiences, especially for first-year students.
- · To foster leadership among students in these communities.

#### **Interdisciplinary Programs**

- To create and coordinate interdisciplinary certificate and degreegranting programs, working closely with the other colleges and schools.
- To develop integrated strands of courses for satisfying campus-wide requirements.

#### **Undergraduate Research**

• To foster undergraduate participation in the University's creative activity and research.

## **Admission and Registration**

Admission and readmission of undergraduate students to the University is the responsibility of the director of admissions. Students who wish to explore one or more fields of study before choosing a major are encouraged to apply for admission to the School of Undergraduate Studies. Students who are not admitted into their desired major in another college or school may also be offered admission to Undergraduate Studies.

Detailed information about the admission process is provided in *General Information* (http://catalog.utexas.edu/general-information), which also includes information about registration, adding and dropping courses, transferring from one division of the University to another, and the academic calendar. The *Course Schedule* (http://registrar.utexas.edu/schedules), published before registration each semester, includes registration instructions, advising locations, and the times, places, and instructors of classes. The *Course Schedule* and *General Information* are available through the registrar's website (http://registrar.utexas.edu).

# Academic Policies and Procedures

## **Basic Education Requirements**

The University strives to enroll exceptionally well-prepared, highly motivated students and to produce self-reliant graduates who will become leaders in both their chosen professions and their communities. The University must not only equip its graduates with occupational skills, but also educate them broadly enough to enable them to adapt to and cope with the accelerated process of change occurring in business, professional, and social institutions today. Students must be exposed to a broad spectrum of arts and science so that they may be educated beyond vocational requirements and thus be prepared for responsible citizenship in an increasingly complex world.

All graduates of the University are expected to:

- communicate clearly and accurately, defend an idea on the basis of evidence, draw conclusions, and evaluate the arguments of others
- have a critical understanding of the society in which we live and the ways it has evolved through time
- · be able to analyze ethical issues and their possible resolutions
- understand facets of science and the ways in which knowledge of the universe is gained and applied
- understand aspects of mathematics and apply quantitative skills to problem solving
- have a critical understanding of how human cultures are expressed in literature, philosophy, or language
- participate in and/or critically analyze some area of the visual and performing arts

• participate in the process of inquiry through research, creative endeavors, or related activities

To help students in all majors acquire the traits of an educated person, the general faculty of the University has adopted the core curriculum outlined below. All students, regardless of major, must complete the core curriculum prior to earning an undergraduate degree.

Often, courses required by the student's degree program may be used concurrently to fulfill one or more of the core curriculum requirements listed below. When possible, students should select core courses that also satisfy specific requirements of their intended degrees. For more information, students should consult their advisers and the degree requirements given in the college/school sections of this catalog.

## **Core Curriculum**

All students pursuing an undergraduate degree at the University must complete the 42-hour statewide core curriculum. The component area requirements are consistent with statewide core curriculum guidelines; the area of the statewide core that each requirement meets is given in parentheses in the table below. A single course may not be counted toward more than one core area.

Courses used to fulfill core curriculum requirements must be taken for a letter grade; the minimum acceptable grade is *D*-. Individual degree plans may not require a higher minimum standard for core courses in general. However individual degree plans may set a higher minimum grade standard for core courses that are also required in the major field or are required as prerequisites for courses in the major.

Core Component Area	Semester Credit Hours
First-Year Signature Course (Texas Core Code 090) Course should be taken during the student's first year enrolled at the University.	3
English Composition and Core Writing Flag (Texas Core Code 010)	6
Humanities (Texas Core Code 040)	3
American and Texas Government (Texas Core Code 070)	6
U.S. History (Texas Core Code 060)	6
Social and Behavioral Sciences (Texas Core Code 080)	3
Mathematics (Texas Core Code (020)	3
Natural Science and Technology, Part I (Texas Core Code 030) Courses should be chosen from a single field of study. Allowable pairings are posted in the current General Information Catalog and on the UGS web page.	6
Natural Science and Technology, Part II (Texas Core Code 093) Course must be chosen from a different field of study than the preceding requirement.	3
Visual and Performing Arts (Texas Core Code 050)	3
Total number of semester credit hours	42

The School of Undergraduate Studies monitors core courses to ensure that they meet the guidelines set by the general faculty and the Texas Higher Education Coordinating Board. For the complete list of courses that have been approved to count for each core component area for all students at The University of Texas at Austin, students should consult the current *General Information Catalog* (http:// catalog.utexas.edu/general-information/academic-policies-andprocedures/core-curriculum) or see the Undergraduate Studies website (https://ugs.utexas.edu/core/requirements/current). Students should consult the *Course Schedule* (http://registrar.utexas.edu/schedules) in order to see the core offerings in any given semester. State law requires that courses fulfilling a core component area (including the institutionally designated option) at one Texas public institution must transfer and substitute for the receiving institution's requirements. However, this only applies to courses taken when a student does not hold degree-seeking status at The University of Texas at Austin, typically before first enrolling at the University. While a student holds degree-seeking status at the University, courses taken to fulfill core curriculum requirements must be chosen from The University of Texas at Austin's core course list published in the *General Information Catalog* (http://catalog.utexas.edu/general-information/academic-policies-andprocedures/core-curriculum) for the current academic year, regardless of where they are taken.

## **Signature Courses**

The Signature Courses at The University of Texas at Austin (Undergraduate Studies 302 and 303) introduce students to new ways of learning through a myriad of subjects and topics by connecting students with distinguished faculty members in unique learning environments. In this rigorous intellectual experience, students develop advanced collegelevel skills in research, writing, speaking, and discussion through an approach that is both interdisciplinary and contemporary. These classes range from the arts and humanities to the hard sciences, but every class has unique components that help students throughout their college career and beyond. All students are required to take a Signature Course to fulfill university core requirements. Transfer students have the option to register for Transfer Signature Courses (https://ugs.utexas.edu/tye/ tsig).

#### The Signature Courses:

- put new students in contact with top faculty from across the University;
- help guide students as they strive to become better writers, speakers, and problem solvers;
- assist students in using research methods and critical thinking skills that are necessary to perform well in all of their other courses;
- · familiarize students with the gems of the University;
- · engage students in a university-wide academic event.

More information about Signature Courses is available at http://ugs.utexas.edu/sig.

## Additional Basic Education Requirements Skills and Experience Flags

The Skills and Experience Flags are a unique and innovative feature of all undergraduate degrees at The University of Texas at Austin. The flags are specifically designed to provide the enriched education that all students will need to become effective future leaders in our society and a constantly evolving workplace. To this end, in the process of fulfilling the core curriculum, major, and other degree requirements, all undergraduate students are required to complete courses with content in the following six flag areas:

- Writing: three flagged courses beyond Rhetoric and Writing 306 or its equivalent
- Quantitative reasoning: one flagged course
- Global cultures: one flagged course
- Cultural diversity in the United States: one flagged course
- Ethics: one flagged course
- · Independent inquiry: one flagged course

Courses used to fulfill flag requirements must be taken for a letter grade unless the flagged course is only offered on a pass/fail basis; the

minimum acceptable grade is *D*-. Individual degree plans may not require a higher minimum standard for flagged courses in general. However, individual degree plans may set a higher minimum grade standard for flagged courses that are also required in the major field or are required as prerequisites for courses in the major.

Courses with sufficient content in these areas will be identified in the *Course Schedule* (http://registrar.utexas.edu/schedules) by the appropriate flags. The School of Undergraduate Studies monitors flagged courses to ensure that they meet the guidelines set by the general faculty. When a course is approved to carry more than one flag, enrolled students may use all of those flags to fulfill degree requirements, except that the global cultures flag and the cultural diversity in the United States flag must be earned in separate courses.

While all undergraduate degree programs require the flags, some are still in the process of implementing the third writing flag requirement. Students who choose to graduate according to the requirements of the 2018–2020 Undergraduate Catalog (http://catalog.utexas.edu/undergraduate) should consult their advisers and the degree requirements listed in the schools/colleges sections of this catalog to determine which of the flag requirements apply to them and how to integrate them into their degree plans.

Because flags are a unique feature of a University of Texas at Austin degree, they are designed to be completed in residence. Students may submit substitution petitions through the School of Undergraduate Studies for the following types of courses to satisfy flag requirements once they have been accepted for University of Texas at Austin credit:

- · courses taken for a letter grade as part of a study abroad program
- · courses taken for a letter grade through Texas Extended Campus
- · in-residence courses taken for a letter grade
- transfer courses from other colleges or universities taken for a letter grade prior to the student's first semester enrolled at The University of Texas at Austin

The following types of courses or credit are rarely eligible for flag substitution:

- dual credit courses, or courses taken prior to high school graduation
- credit-by-exam courses, including courses for which Advanced Placement, A levels, or International Baccalaureate credit is earned
- any course of less than three weeks (fewer than 21 days)
- transfer courses from other colleges or universities taken during or after the student's first semester enrolled at The University of Texas at Austin (with the exception of study abroad courses)

In all cases, flag substitution petitions will be evaluated to determine whether the course taken satisfies the flag criteria and interpretation at a level of rigor expected for courses at The University of Texas at Austin.

## Foreign Language

In addition to the core curriculum requirements above, undergraduates are expected to have completed two years in a single foreign language in high school. Students without at least two years of high school foreign language coursework in the same foreign language must earn credit for the beginning level proficiency course or sequence in a foreign language; this credit does not count toward the student's degree. For the description of beginning level proficiency in a specific foreign language, please see https://liberalarts.utexas.edu/student-affairs/ Majors-and-Degrees/foreign-language-requirement.php. Students should consult their advisers and the degree requirements listed in the colleges/ schools sections of this catalog to determine whether additional foreign language requirements apply to them.

## **Minor and Certificate Programs**

## **Bridging Disciplines Programs**

The Bridging Disciplines Programs (BDPs) support students in becoming versatile thinkers with the skills to collaborate across disciplines and cultures. The BDPs are designed to complement a student's major with an individualized plan of study leading to an interdisciplinary certificate in one of the following areas:

- · Children and Society
- Conflict Resolution and Peace Studies
- Design Strategies
- Digital Arts and Media
- · Environment and Sustainability
- Ethics and Leadership in Business
- Ethics and Leadership in Health Care
- · Ethics and Leadership in Law, Politics, and Government
- · Ethics and Leadership in Technology and the Media
- Global Studies
- · Human Rights and Social Justice
- Innovation, Creativity, and Entrepreneurship
- Media, Culture, and Identities
- Museum Studies
- Public Policy
- Social Entrepreneurship and Nonprofits
- Social Inequality, Health, and Policy

Each BDP is overseen by an interdisciplinary faculty panel that sets policy, approves courses, and selects students. Within each broad area, students choose a strand of specialized courses drawn from disciplines across the University. Students are encouraged to use the BDP theme to select courses and integrate degree requirements; to this end, courses taken to fulfill core curriculum requirements, courses fulfilling major requirements, and electives may also be counted toward a BDP. In order to provide students with an interdisciplinary set of perspectives on their BDP topics, the BDP certificate may include no more than one strand course from a student's major(s), and students will be required to work with a BDP adviser to ensure that the certificate as a whole is interdisciplinary. Participation in undergraduate research, internships and creative projects is also central to the design of the BDPs.

All degree-seeking undergraduates at the University are eligible to apply for the BDPs. With careful planning, a BDP can complement most degree plans. However, because the BDPs build on core requirements and electives, students are encouraged to start early in their University careers. Students using a BDP certificate to satisfy a specific degree requirement should consult their major and BDP advisers about possible restrictions on what courses may simultaneously satisfy BDP and other degree requirements. Because there is significant overlap in program focus and course work, the following majors and BDP certificates may not be combined:

- Students majoring in Arts and Entertainment Technology may not pursue the Digital Arts and Media BDP.
- Students majoring in Environmental Science or Sustainability Studies may not pursue the Environment and Sustainability BDP.
- Students majoring in Communication and Leadership may not pursue the Ethics and Leadership in Technology and the Media BDP.
- Students majoring in Public Health or Health and Society may not pursue the Public Health strand of the Social Inequality, Health, and

Policy BDP; they may, however, pursue other strands within that program.

Undergraduates who complete BDP requirements in conjunction with their degree requirements or within one year after earning the degree receive a certificate and recognition on the University transcript; students in integrated undergraduate/graduate programs must complete certificate requirements within one year after they complete their undergraduate degree requirements. A maximum of nine semester hours of the certificate coursework may be taken after the student has earned the undergraduate degree. At least half of the required certificate coursework must be completed in residence at the University.

Students should request certification from the BDP office when they apply for graduation or when they complete the certificate program, whichever is later. Transcript recognition is awarded at the end of that semester or summer session.

In order to earn a BDP certificate, students must satisfy the following requirements:

#### Requirements

Hours

19

At least 19 semester hours of coursework. The distribution of coursework varies by specialization, and students should consult the BDP office for the requirements of each program. For all specializations, the coursework requirements consist of the following:

Foundation Courses: 1 to 10 hours in foundation courses that introduce key concepts and methodologies related to the interdisciplinary concentration.

Connecting Experiences: 3 to 9 hours in undergraduate research, internships, and/or creative project courses that connect students' interdisciplinary concentration to their major.

Courses in a Strand: 6 to 12 hours in courses in a strand, which allows students to focus their remaining BDP coursework. <sup>1</sup>

A three- to four-page integration essay in which students reflect on what they have learned and accomplished through their BDP experience.  $^2$ 

Completion of the requirements of a major.

Please Note:

Students must earn a grade of at least C- in each of the courses taken to fulfill BDP requirements and the cumulative grade point average in all courses counting toward a student's BDP certificate must be at least 2.00. All but one of the courses taken to fulfill BDP requirements must be taken on the letter-grade basis.

At least half of the required course work in the BDP certificate must be completed in residence at The University of Texas at Austin.

1. Course listings for BDP strands are located on the BDP website at http://ugs.utexas.edu/bdp.

2. These essays will be reviewed by members of a BDP faculty panel. Additional guidelines are available from the BDP advisers.

More information about BDPs is available at http://ugs.utexas.edu/bdp.

## Courses

#### **Bridging Disciplines: BDP**

#### **Lower-Division Courses**

#### BDP 101, 201, 301. Forum Seminar Series.

Restricted to freshmen and sophomores, and to students in the Bridging Disciplines Programs. Discussion of various contemporary issues, with an emphasis on interdisciplinary perspectives and critical discourse. For 101, two lecture hours a week for eight weeks; for 201, two lecture hours a week for one semester; for 301, three lecture hours a week for one semester. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: Varies with the topic.

#### BDP 306. Fundamentals of Ethical Leadership.

Restricted to freshmen and sophomores, and to students in the Bridging Disciplines Programs. Discussion of various contemporary issues related to ethical leadership, with an emphasis on interdisciplinary perspectives and critical discourse. Three lecture hours a week for one semester. Offered on the letter-grade basis only.

#### BDP 306C. Principles of Business.

Restricted to nonbusiness students. Interdisciplinary examination of how businesses function in the Western world. Discusses the development of the corporation in the United States, ethical issues, and the primary areas of business. Three lecture hours a week for one semester. Bridging Disciplines 301 (Topic: Principles of Business) and 306C may not both be counted. Offered on the letter-grade basis only.

#### BDP 111, 211, 311. Connecting Internship Experience.

Restricted to students in the Bridging Disciplines Programs. Supervised internship experience related to the interdisciplinary themes of a Bridging Disciplines Program. Internships may be paid or unpaid, and may include work with nonprofit agencies, government offices, or private corporations. For 111, three hours of fieldwork a week for one semester; for 211, six hours of fieldwork a week for one semester; for 311, ten hours of fieldwork a week for one semester. With consent of the Bridging Disciplines research coordinator, may be repeated once for credit. Prerequisite: Consent of the Bridging Disciplines research coordinator.

#### BDP 119, 219, 319. Specialized Forum Seminar Series.

Restricted to freshmen and sophomores. Discussion of various contemporary issues, with an emphasis on multidisciplinary perspectives and critical discourse. For 119, two lecture hours a week for eight weeks or one lecture hour a week for one semester; for 219, two lecture hours a week for one semester; for 319, three lecture hours a week for one semester; additional hours may be required for some topics. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

#### BDP 319D. Introduction to Digital Media Production.

Introduction to digital media production, including the fundamentals of software programs used for digital design, web production, animation, and other functions. Three lecture hours a week for one semester. Bridging Disciplines 319 (Topic: Introduction to Digital Media Production) and 319D may not both be counted.

#### **Upper-Division Courses**

#### BDP 120K, 220K, 320K. Connecting Research Experience.

Restricted to students in the Bridging Disciplines Programs. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May be repeated for credit.

#### BDP 320L. Connecting Research Experience.

Restricted to students in the Bridging Disciplines Programs. Supervised research with a faculty member, related to the interdisciplinary themes

of a Bridging Disciplines Program. Research may consist of an individual project and must meet the criteria for the independent inquiry flag. The equivalent of three lecture hours a week for one semester. May be repeated for credit.

## BDP 320M. Connecting Research Experience: Service Learning.

Restricted to students in the Bridging Disciplines Programs. Supervised research with a faculty member, related to the interdisciplinary themes of a Bridging Disciplines Program and including an academic service-learning component. Research may consist of an individual project involving service to the community or assisting a faculty research project with a community service component. Individual instruction. May be repeated for credit. Prerequisite: Upper-division standing and consent of the Bridging Disciplines Programs.

## BDP 321M. Connecting Internship Experience: Service Learning.

Restricted to students in the Bridging Disciplines Programs. Supervised internship experience related to the interdisciplinary themes of a Bridging Disciplines Program and including an academic service-learning component. Internships must be unpaid and may include work with nonprofit organizations or other organized community service entities. Ten hours of fieldwork a week for one semester. With consent of the Bridging Disciplines Research Programs, may be repeated once for credit. Prerequisite: Upper-division standing and consent of the Bridging Disciplines research coordinator.

#### BDP 322K. Team-Based Research Experience.

Collaborative or team-based research or creative project, under the supervision of a faculty member. Topics are related to the interdisciplinary themes of the Bridging Disciplines Programs. Individual instruction. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and consent of the Bridging Disciplines Programs; additional prerequisites may vary with the topic.

#### BDP 125K, 225K, 325K. Connecting Internship Experience.

Restricted to students in the Bridging Disciplines Programs. Supervised internship experience related to the interdisciplinary themes of a Bridging Disciplines Program. For 125K, three hours of fieldwork a week for one semester; for 225K, six hours of fieldwork a week for one semester; for 325K, ten hours of fieldwork a week for one semester. May be repeated for credit. Prerequisite: Consent of the Bridging Disciplines Programs.

#### BDP 126, 226, 326. Advanced Forum Seminar Series.

Discussion of contemporary issues related to the topics of a Bridging Disciplines Program, with an emphasis on interdisciplinary perspectives and critical discourse. For 126, two lecture hours a week for eight weeks or one lecture hour a week for one semester; for 226, two lecture hours a week for one semester; for 326, three lecture hours a week for one semester; additional hours may be required for some topics. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites may vary with the topic.

## BDP 129, 229, 329. Specialized Advanced Forum Seminar Series.

Discussion of contemporary issues related to the topics of a Bridging Disciplines Program, with an emphasis on interdisciplinary perspectives, research, and critical discourse. For 129, two lecture hours a week for eight weeks or one lecture hour a week for one semester; for 229, two lecture hours a week for one semester; for 329, three lecture hours a week for one semester; additional hours may be required for some topics. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites vary with the topic.

#### **Developmental Studies: DEV**

#### **Lower-Division Courses**

#### DEV 000M. Basic Mathematics and Algebra Skills.

Developmental mathematics instruction. Emphasis on fundamental mathematics, including computation skills, graphing, and solving word problems, and on algebraic graphing, equations, operations, and quadratics. Three lecture hours a week for one semester. Offered on the satisfactory/unsatisfactory basis only. With consent of the Texas Success Initiative office, may be repeated for credit. May not be counted toward any degree.

#### DEV 000R, 300R. Basic Reading Skills.

Developmental reading instruction, with emphasis on strategies for improving vocabulary, reading comprehension, and reading study skills. Three lecture hours a week for one semester. Offered on the satisfactory/ unsatisfactory basis only. With consent of the Texas Success Initiative office, may be repeated for credit. May not be counted toward any degree.

#### DEV 000W, 300W. Basic Writing Skills.

Developmental writing instruction, with emphasis on the elements of composition, sentence structure, and standard English usage and mechanics. Three lecture hours a week for one semester. Offered on the satisfactory/unsatisfactory basis only. With consent of the Texas Success Initiative office, may be repeated for credit. May not be counted toward any degree.

#### DEV 301M. Developmental Mathematics I.

The first of a two-course sequence. Combines arithmetic skills, including operations with whole numbers, fractions, and decimals, and ratios, proportions, and percents; with beginning algebra, including variables, straight-line graphs, setting up and solving word problems, and relating simple algebraic concepts to geometry. Three lecture hours a week for one semester. Offered on the satisfactory/unsatisfactory basis only. May not be counted toward any degree.

#### DEV 302M. Developmental Mathematics II.

Continuation of Developmental Studies 301M. Includes linear equations, systems of equations, integers, exponents and scientific notation, factoring polynomials, rational expressions and equations, radical expressions, and geometric problems. Three lecture hours a week for one semester. Offered on the satisfactory/unsatisfactory basis only. May not be counted toward any degree.

#### DEV 303M. Basic Mathematics and Algebra Skills Review.

Three lecture hours a week for one semester. Offered on the satisfactory/ unsatisfactory basis only. May not be counted toward any degree.

#### DEV 303S. Analytical Reading and Writing.

Examination of fundamental concepts in analytical reading from different disciplinary perspectives, with an emphasis on sociocultural influences on comprehension and writing styles. Three lecture hours a week for one semester. Developmental Studies 303S and Undergraduate Studies 309 may not both be counted. May not be counted toward any degree. Offered on the letter-grade basis only. Prerequisite: Consent of the Texas Success Initiative coordinator.

## Upper-Division Courses Undergraduate Studies: UGS Lower-Division Courses

#### UGS 302. First-Year Signature Course.

Restricted to first-year students. Seminar class focusing on a contemporary issue. Designed to introduce undergraduates to scholarly analysis from an interdisciplinary perspective. Includes an introduction to University resources, such as research facilities, museums, and attendance at University lectures or performances as assigned. Multiple sections may be offered in the fall and spring with various topics and instructors. Three lecture hours a week for one semester. Some sections may require additional meeting times; these are identified in the Course Schedule. Only one of the following may be counted: Tutorial Course 302, Undergraduate Studies 302, 303.

#### UGS 303. First-Year Signature Course.

Restricted to first-year students. Large-group lecture and discussion class focusing on a contemporary issue. Designed to introduce undergraduates to scholarly analysis from an interdisciplinary perspective. Includes an introduction to University resources, such as research facilities, museums, and attendance at University lectures or performances as assigned. Multiple sections may be offered in the fall and spring with various topics and instructors. Three lecture hours a week for one semester. Some sections may require additional meeting times; these are identified in the Course Schedule. Only one of the following may be counted: Tutorial Course 302, Undergraduate Studies 302, 303.

#### UGS 104. First-Year Interest Group Mentor Seminar.

Restricted to students selected as mentors for the First-Year Interest Group program. Issues and research in various areas of leadership, communication, student development, and the transition from high school to college. One lecture hour a week for one semester. Offered on the pass/fail basis only. Prerequisite: Consent of the program coordinator of the First-Year Interest Group program office.

#### UGS 104T. Transfer Year Interest Group Mentor Seminar.

Restricted to students selected as mentors for the Transfer-Year Interest Group program. Issues and research in various areas of leadership, communication, student development, and transfer student success. One hour a week for one semester Offered on the pass/fail basis only.

#### UGS 106C. DSP Spring Seminar.

Restricted to students in the Discovery Scholars Program. Basic issues in various interdisciplinary fields of study. One hour a week for one semester. Offered on the pass/fail basis only.

#### UGS 107D. Topics in Undergraduate Studies.

Restricted to students in the School of Undergraduate Studies. Topics in undergraduate major and course exploration. One lecture hour a week for one semester. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

Topic 1: Spatial Visualization. Research has shown that students with developed spatial visualization skills are more successful in physics, chemistry and calculus courses. Focus on how to 'see' things in 3-D, improving their success in these subjects and their ability to problem solve. Offered on the letter-grade basis only. Additional prerequisite: An appropriate score on the spatial visualization placement exam. Topic 2: Exploring Careers and Majors. Aimed at undeclared students who are choosing a major or in the early stages of career exploration. Learn skills to make an informed and meaningful career decision and begin the process of career development. Use self-exploration

activities and learn about resources to identify majors and careers that fit with their values, interests, personality and skills. Explores professional skills such as resume writing and internship planning to continue career development strategies. Offered on the letter-grade basis only.

#### UGS 110K, 210K, 310K. Undergraduate Research Experience.

Restricted to freshmen and sophomores. Supervised research with a faculty member. Research may consist of an individual project or assisting a faculty research project. Individual instruction. Undergraduate Studies 110K and 110 may not both be counted. May be taken six times for credit. May be repeated for credit. Prerequisite: Consent of the undergraduate studies research coordinator.

#### UGS 111, 211, 311. Undergraduate Internship Experience.

Supervised internship experience. Internships may be on or off campus, be paid or unpaid, and may include work with nonprofit agencies, government offices, or private corporations. For 111, three hours of fieldwork a week for one semester; for 211, six hours of fieldwork a week for one semester; for 311, ten hours of fieldwork a week for one semester. Prerequisite: Consent of the undergraduate studies research coordinator.

#### UGS 312. Research Methods.

Interdisciplinary introduction to research methods, designed to lead students through the process of designing an undergraduate research project. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Consent of the undergraduate research coordinator.

#### UGS 114M. Fundamentals.

Restricted to students in the School of Undergraduate Studies. Learn skills to increase academic potential. A specialized course facilitated by a Learning Specialist from the Sanger Learning Center designed to support students experiencing academic difficulty by providing structured academic support. Two lecture hours a week for one semester. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: Referral from academic advisor.

#### UGS 017. First-Year Connection Seminar.

Restricted to students in a First-Year Connection seminar program. Basic issues in various interdisciplinary fields of study. One lecture hour a week for one semester. May not be counted toward any University of Texas at Austin degree. Fulfills the criteria for a 360 Connection. May be repeated for credit.

#### UGS 018. First-Year Interest Group Seminar.

Restricted to students in the First-Year Interest Group Program. Basic issues in various interdisciplinary fields of study. One lecture hour a week for one semester. Fulfills the criteria for a 360 Connection.

#### UGS 018S. Sophomore Interest Group Seminar.

Restricted to students in the Sophomore Interest Group program. Basic issues in various interdisciplinary fields of study. One lecture hour a week for one semester. May not be counted toward any University of Texas at Austin degree. May be repeated for credit.

#### UGS 018T. Transfer Interest Group Seminar.

Restricted to students in the Transfer Interest Group Program. Basic issues in various interdisciplinary fields of study. One lecture hour a week for one semester. May not be counted toward any University of Texas at Austin degree. May be repeated for credit.

#### UGS 119. International Learning Seminar.

Restricted to students registered in a Maymester Abroad course. Discussion of various issues related to the academic, cultural, and personal aspects of studying abroad in particular locations. Two lecture hours a week for eight weeks, or as required by the topic. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

#### **Upper-Division Courses**

#### UGS 120K, 220K, 320K. Undergraduate Research Experience.

Supervised research with a faculty member. Research may consist of an individual project or assisting a faculty research project. Individual instruction. Undergraduate Studies 120K, 220K, 320K and 120, 220, 320 may not both be counted. May be taken six times for credit. May be repeated for credit. Prerequisite: Upper-division standing and consent of the undergraduate studies research coordinator.

#### UGS 320L. Undergraduate Research Experience.

Supervised research with a faculty member. Research may consist of an individual project and must meet the criteria for the independent inquiry flag. The equivalent of three lecture hours a week for one semester. With consent of the undergraduate studies research coordinator, may be repeated for credit. Undergraduate Studies 320F and 320L may not both be counted. May be repeated for credit.

#### UGS 121, 221, 321. Undergraduate Internship Experience.

Supervised internship experience. Internships may be on or off campus, be paid or unpaid, and may include work with nonprofit agencies, government offices, or private corporations. For 121, three hours of fieldwork a week for one semester; for 221, six hours of fieldwork a week for one semester; for 321, ten hours of fieldwork a week for one semester. Prerequisite: Upper-division standing and consent of the undergraduate studies research coordinator.

## **Programs and Centers**

#### James W. Vick Center for Strategic Advising & Career Counseling

The James W. Vick Center for Strategic Advising & Career Counseling integrates learning-centered academic advising with career counseling to assist students enrolled in the School of Undergraduate Studies and all students interested in changing majors at The University of Texas at Austin.

Vick Center advisers and counselors serve on cross-functional teams, bringing knowledge and expertise about major and career exploration together to help students plan their educational and career paths.

After a period of up to four semesters of exploration and strategic advising, students in the School of Undergraduate Studies choose a major in one of the University's other colleges or schools. More information about the James W. Vick Center for Strategic Advising & Career Counseling is available at http://ugs.utexas.edu/vick.

#### Sanger Learning Center

The Sanger Learning Center is a university-wide learning resource dedicated to students' mastery of course content and development of transferable academic and professional skills. Services are free to currently enrolled students in all schools and colleges (some restrictions may apply).

#### **Summary of Services**

- Appointment Tutoring provides one-to-one tutoring sessions for many challenging undergraduate courses.
- Drop-in Tutoring offers informal, group-based content support for many lower-division math, physics, and chemistry courses.
- Learning Specialist Appointments are private academic counseling appointments. Students can explore time management, study skills, test anxiety and more with SLC professional staff.
- Math Refreshers are workshops to refresh students' algebra, trigonometry, and calculus skills.
- Math Reviews help calculus and pre-calculus students prepare for exams.
- Peer Academic Coaching offers students the opportunity to develop effective study skills by meeting one-on-one with a trained peer academic coach.
- Peer-led Undergraduate Studying supports student performance and motivation with weekly study groups in historically difficult upperdivision courses.
- The Public Speaking Center provides one-to-one consultation services to undergraduate and graduate students who are working on oral communication assignments.
- Supplemental Instruction offers guided study sessions to support students in historically difficult, lower-division courses.

More information about the Sanger Learning Center is available at http://ugs.utexas.edu/slc.

## **360 Connections**

The 360 Connections initiative was developed so all first-year students have the opportunity to connect with a small peer group during their first semester on campus. By participating in a 360 Connection (which may be a cohort, program, community, group, or class), students receive a holistic, 360° view of life as a Longhorn. More information about the 360 Connections is available at http://ugs.utexas.edu/360.

#### **First-year Interest Groups**

A First-year Interest Group (FIG) is comprised of 18-25 new students who take two to four classes together during their first semester at the University. FIGs help students integrate socially, academically, and developmentally to ensure a smooth transition to college life, leading to academic success and on-time graduation. Each group attends a weekly seminar led by a peer mentor and a staff facilitator. Each FIG student attends classes, studies, and participates in various activities with their mentor and fellow first-years. More information about FIGs is available at http://ugs.utexas.edu/fig.

#### **Transfer-year Interest Groups**

Transfer-year Interest Groups (TrIGs) provide a unique opportunity for new transfer students to build a peer academic community, gain the skills to meet the University's level of academic rigor, and register for their first-choice courses. Each TrIG includes a peer mentor and staff facilitator who meet with students in regular seminars, small group meetings, and one-on-one discussions. More information about TrIGs is available at http://ugs.utexas.edu/tye/trig.

## **Bridging Disciplines Programs**

The Bridging Disciplines Programs (BDPs) are designed to complement a student's major with an individualized plan of study leading to an interdisciplinary certificate in one of the following areas:

- · Children and Society
- Conflict Resolution and Peace Studies
- Design Strategies
- Digital Arts and Media
- · Environment and Sustainability
- Ethics and Leadership in Business
- · Ethics and Leadership in Health Care
- Ethics and Leadership in Law, Politics, and Government
- · Ethics and Leadership in Technology and the Media
- Global Studies
- Human Rights and Social Justice
- · Innovation, Creativity, and Entrepreneurship
- · Media, Culture, and Identities
- Museum Studies
- Public Policy
- Social Entrepreneurship and Nonprofits
- · Social Inequality, Health, and Policy

All degree-seeking undergraduates at the University are eligible to apply. More information about BDPs is available at http://ugs.utexas.edu/bdp.

## Office of Undergraduate Research

The Office of Undergraduate Research (OUR) fosters undergraduate participation in research and creative activity across the disciplines by raising the visibility of undergraduate research on campus, facilitating students' pursuit of research related to their interests and goals, and helping students share their work with others.

Services offered include weekly sessions on how to get involved in research, individual advising, and workshops on a variety of topics like designing and presenting a research poster. The office coordinates Research Week, the University's annual celebration of undergraduate research and creative activity.

Undergraduate Research also oversees Eureka (https:// eureka.utexas.edu), an online database devoted to undergraduate research projects and opportunities at the University. More information on the Office of Undergraduate Research is available at http:// ugs.utexas.edu/our.

## **Discovery Scholars Program**

The Discovery Scholars Program (DSP) is a four-year, learning community program for select students in the School of Undergraduate Studies. Students are invited to participate, and the DSP staff provides support for their transition from high school to college and connects them to campus resources. Students are also encouraged to take responsibility for their individual educational journey. Benefits include individualized educational planning and advising, small-section course options, tutoring, mentoring, community programming, and a focus on academic and civic development. More information about the Discovery Scholars Program is available at http://ugs.utexas.edu/dsp.

#### **Texas Success Initiative**

The Texas Success Initiative (TSI) is a state-mandated program designed to improve student success in college. There are two components of the program: (1) an assessment to determine students' basic skills in reading, mathematics, and writing and (2) developmental instruction to strengthen academic skills. Developmental instruction options include a co-requisite model under which students concurrently enroll in a developmental studies course and credit-bearing course for each subject area for which the student is referred to developmental coursework. Co-requisite courses are available only to students who meet both Texas Success Initiative (TSI) eligibility and specific program requirements.

All non-exempt students are required by law to take the TSI Assessment (TSIA), which is the only college-readiness assessment approved by the Texas Higher Education Coordinating Board. More information about the Texas Success Initiative, including a list of exemptions, is available in the *General Information Catalog* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/the-texas-success-initiative) and at http://ugs.utexas.edu/tsi.

# **School of Architecture**

D. Michelle Addington, DDes, Dean Allan W. Shearer, PhD, Associate Dean for Research and Technology Francisco H. Gomes, M Arch, Associate Dean for Academic Affairs Charlton N. Lewis, M Arch, Assistant Dean for Student Affairs Jeff S. Evelyn, BA, Assistant Dean, Administration http://soa.utexas.edu/

## **General Information**

## Accreditation

The School of Architecture is a member of the Association of Collegiate Schools of Architecture and the Association of Collegiate Schools of Planning.

In the United States, most registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit professional degree programs in architecture offered by institutions with U.S. regional accreditation, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted an eight-year, three-year, or two-year term of accreditation, depending on the extent of its conformance with established institutional standards.

Doctor of Architecture and Master of Architecture degree programs may require a preprofessional undergraduate degree in architecture for admission. However, the preprofessional degree is not, by itself, recognized as an accredited degree.

The University of Texas at Austin School of Architecture offers the following NAAB-accredited degree programs:

- · B. Arch. (161 undergraduate credits)
- M. Arch (preprofessional degree + 60 credits)
- M. Arch. (non-preprofessional degree + 111 credits)

Most recent accreditation visit for all programs: 2018

The Bachelor of Architecture and Master of Architecture satisfy the registration requirements of the Texas Board of Architectural Examiners.

The Council for Interior Design Accreditation (CIDA) is an independent, non-profit accrediting organization for interior design education programs at colleges and universities in the United States and internationally. Founded in 1970, this knowledge-driven organization has been passionately committed to the ongoing enrichment of the interior design profession through identifying, developing and promoting quality standards for the education of entry-level interior designers, and then encouraging, accrediting and supporting educational programs to aspire to those standards.

Through a process of program self-evaluation and peer review, accreditation promotes achievement of high academic standards, while making education more responsive to student and societal needs. More than 150 interior design programs are currently accredited by the Council, serving an estimated 20,000 students.

The University of Texas at Austin School of Architecture offers the following CIDA-accredited degree program:

Bachelor of Science in Interior Design (126 credits)

Next accreditation visit for Interior Design: Fall 2020

The Bachelor of Science in Interior Design satisfies the interior design registration requirements of the Texas Board of Architectural Examiners, and is also accredited by the National Association of Schools of Art and Design.

The Master of Science in Community and Regional Planning is accredited by the American Planning Association.

### Mission

The School of Architecture seeks to assist those who wish to develop knowledge, sensitivity, and skill in design, planning, and construction, so that as architects, interior designers, and planners they may improve the human environment. The curriculum offers opportunities for a broad education in professional subjects and in the arts and the humanities. Through avenues that stress solving actual and theoretical problems, the school seeks to enhance the knowledge and skill necessary to link understanding to experience, theory to practice, and art to science in ways that respond to human needs, aspirations, and sensibilities. Through its consortium of architects, interior designers, planners, and educators and scholars in these fields, the school provides a service to society and to the architecture, interior design, and planning professions by advancing the state of the art in design and technology.

#### History

The University began offering professional degrees in architecture in 1910 within the Department of Engineering. The School of Architecture was established in 1948 as a division of the College of Engineering and became an autonomous school of the University in September 1951. Graduate study in architecture began at the University in 1912. More than five thousand undergraduate and graduate degrees in architecture and planning have been conferred.

Education in community and regional planning was first offered as an undergraduate study option in the School of Architecture from 1948 to 1957. The Master of Science in Community and Regional Planning was formally approved in October 1959; the Doctor of Philosophy, in April 1995.

Education in interior design was first offered in 1939 within the degree of Bachelor of Science in Home Economics. In 1992 the College of Natural Sciences created the Bachelor of Science in Interior Design degree program; in the fall of 1998 this program was transferred to the School of Architecture. The first interior design degrees were conferred by the school in May 2001.

## Facilities

The School of Architecture is centrally located on campus in four adjacent buildings: the historically significant Battle Hall (1911); Sutton Hall (1918, renovated in 1982), designed by distinguished American architect Cass Gilbert; Goldsmith Hall (1933, expanded and renovated in 1988), designed by noted architect Paul Philippe Cret, one of the primary planners of the forty-acre campus; and the West Mall Office Building (1961).

The Architecture and Planning Library, a branch of the top-tier University of Texas Libraries system, provides reference and instructional services through expert staff to researchers who have access to over 100,000 volumes, including 20,000 rare volumes in Special Collections, 300 periodicals, and a wealth of online resources.

The Alexander Architectural Archive joins the library as a research center of national importance with nearly half a million drawings, 1,800 linear

feet of papers, photographs, and other formats acquired, preserved, and made available for scholarship.

The Visual Resources Collection + Darkroom + Lighting Studio includes a growing collection of over 140,000 digital images of significant works of architecture, interior design, and landscape architecture for use in teaching, research, and scholarly publications. A fully equipped black and white darkroom and a lighting studio—where models can be photographed using professional equipment—are available by appointment to currently enrolled School of Architecture students.

The University Co-op Materials Resource Center offers an inspirational environment of material systems and technologies. The circulating library includes 28,000+ samples representing emerging, innovative, and sustainable design materials.

The Technology Lab + Computer Classrooms are the technological environment for individual, group, and classroom work. The classrooms have computer workstations formatted with up-to-date software. The Technology Lab houses the Service Desk, a central hub for access to production and digital fabrication facilities, including high-resolution plotting, printing, 3D printing, laser cutting, scanning, portfolio printing, and equipment checkout.

The Thermal Lab is a research facility used by the School of Architecture and the Cockrell School of Engineering for experiments on the ways innovative building facades perform with respect to light, heat, and energy use.

The Wood Shop plays an integral role in the creation of design, ranging from models to full-scale applications, by providing equipment and training, primarily in wood, but also in metal, plastic, and glass.

The Center for American Architecture and Design regularly stages symposia; publishes *CENTER, Centerline*, and the *O'Neil Ford Monograph* and *Duograph* book series; and supports independent research and scholarship in architecture and design. In addition, the center hosts the bi-weekly *Friday Lunch Forum Series*.

The Center for Sustainable Development supports the study and practice of sustainable development in Texas, the nation, and the world through complementary programs of research, education, and community outreach. Associated faculty and students strive to better understand the connections between the environment, economic prosperity and social justice.

The Architectural Conservation Lab provides a facility for Historic Preservation materials conservation courses and for faculty and students with conservation research projects. Additionally, the space allows the Historic Preservation program to establish affiliations with related facilities on the University campus.

The Lady Bird Johnson Wildflower Center exists to conduct innovative native plant research, develop comprehensive educational materials, and consult on landscape development projects of all sizes to capitalize on the ability of native landscapes to improve communities. The mission of the Lady Bird Johnson Wildflower Center is to increase the sustainable use and conservation of native wildflowers, plants, and landscapes.

The Harry Ransom Center, one of the world's foremost institutions for literary and cultural research, houses a large collection of rare architecture books, including the classics of architectural literature.

The Teresa Lozano Long Institute of Latin American Studies and the Benson Latin American Collection provide exceptional opportunities for the study of Latin American architecture.

# Financial Assistance Available through the School

Scholarship funds established by individuals, firms, foundations, and the University are available to current undergraduates in the School of Architecture. These include:

#### Scholarships

Yvette Atkinson Memorial Scholarship in Architecture Marvin E. and Anne Price Beck Endowed Scholarship Carl O. Bergquist Endowed Scholarship Myron Geer Blalock Endowed Presidential Scholarship Hal Box Endowed Scholarship in Architecture C. William Brubaker/Perkins+Will Endowed Presidential Scholarship John Buck Company and First Chicago Investment Advisors for Fund F Endowed Scholarship in Architecture Matt Casey Memorial Scholarship in Architecture John S. Chase Endowed Presidential Scholarship Dick Clark Student Travel Fund Fred W. and Laura Weir Clarke Endowed Presidential Scholarships in Architecture Honoring Carl Bergguist and Alan Y. Taniguchi Peter O. Coltman Book Prize in Architecture and Planning Fred Winfield Day, Jr. Endowed Scholarship in Architecture Jorge Luis Divino Centennial Scholarship in Architecture Amy Dryden Endowed Scholarship Snøhetta Endowed Scholarship in Architecture established by Craig Dykers and Elaine Molinar William H. Emis III Traveling Scholarship in Architecture Ford, Powell and Carson Endowed Scholarship Ted Freedman Endowed Scholarship Suzie Friedkin Endowed Scholarship in Interior Design Adam Conrad Grote Memorial Scholarship in Architecture The HDR Architecture Endowed Scholarship The Janet C. and Wolf E. Jessen Endowed Presidential Scholarship Henrietta Chamberlain King Endowed Scholarship Lake/Flato Endowed Scholarship Lynne Brundrett Maddox Scholarship in Interior Design Mike and Maxine Mebane Endowed Traveling Scholarship in Architecture Jack H. Morgan Endowed Scholarship; the Charles M. Nettles Endowed Presidential Scholarship **Oglesby Prize Endowment Overland Partners Endowed Presidential Scholarship** Barbara and Donald Pender Endowed Scholarship Edward J. Perrault Endowed Presidential Scholarship in Interior Design Alma Piner Scholarship in Architecture Boone Powell Family Prize in Urban Design Debbie Ann Rock Scholarship in Interior Design School of Architecture Scholarship and Fellowship Award Endowment Brandon Shaw Memorial Endowed Scholarship Louis F. Southerland Endowed Scholarship Lance Tatum Endowed Scholarship University of Texas at Austin School of Architecture's Advisory Council Women's Endowed Scholarship Wilmont "Vic" Vickrey Endowed Scholarship Lily Rush Walker and Coulter Hoppess Scholarship in Architecture

Robert Leon White Memorial Fund-Architecture Roxanne Williamson Endowed Scholarship

Additionally, there are several scholarships provided by the American Institute of Architects, the American Architectural Foundation, the Texas Society of Architects, the Texas American Planning Association, and the Texas Architectural Foundation. Additional information is available in the Office of the Dean.

Incoming students may wish to contact local chapters of the American Institute of Architects, the American Society of Interior Designers, the International Interior Design Association, and the University's Texas Exes, as well as other civic organizations, for information about locally sponsored scholarships. Students are also encouraged to contact the University's Office of Financial Aid for information about other merit- and need-based scholarships.

## **Student Services**

#### **Academic Advising**

In the School of Architecture, the undergraduate dean's office, located in Goldsmith Hall 2.116, and the academic adviser's office, located in Goldsmith Hall 2.118, are responsible for providing information and advice to undergraduate students. An important aspect of the advising system is the third-year portfolio requirement described in the section Third-year Portfolio Review Requirement (p. 33) later in Admission and Registration. The student should also consult Degree Audit in the Graduation (p. 34) section.

#### **Career Services**

The Career Services Center, located in Sutton Hall 2.126, serves the students and alumni of the School of Architecture by offering career development and job search resources, connecting them to employers, mentors, and key professionals.

## **Student Organizations**

The Undergraduate Architecture Student Council (UASC) represents all School of Architecture undergraduate students through the promotion and development of an awareness of the built environment and serves as a nucleus for student activities. The UASC acts as a liaison between students and faculty members as well as administrators.

Alpha Rho Chi (APX) is a professional and social co-ed fraternity for architecture and the allied arts that promotes the artistic, scientific, and practical proficiency of its members and the profession. The Dinocrates Chapter at The University of Texas at Austin unites students from various years and studies through philanthropic and professional activities.

American Institute of Architecture Students (AIAS) is a professional organization whose mission is to promote excellence, appreciation, and advancement of architecture, and to enrich communities in a spirit of collaboration. AIAS strives to provide a sense of community and a forum for sharing different views.

Ampersand (&) is a student organization that combines the student chapters of the International Interior Design Association (IIDA) and the American Society of Interior Designers (ASID), provides students with networking opportunities, and promotes involvement within the interior design community.

The National Organization of Minority Architecture Students (NOMAS) is The University of Texas at Austin Student Chapter of the National Organization of Minority Architects. The organization strives to enhance education and professional networking as well as engage solutions to ensure a healthy living and working environment for the community at large.

The Society of Engineering and Architecture Students (SEAS) focuses on providing academic and social support to students in the Bachelor of Architecture/Bachelor of Science in Architectural Engineering dual degree program.

Tau Sigma Delta is an honors society for advanced students pursuing architectural study and the allied arts. The national chapter originated in 1913, and the School of Architecture established its own chapter, Mu, in 1931. In 2013, the 100th year anniversary of the original honors society, the School of Architecture reactivated the Mu chapter. This organization recognizes the significant level of academic achievement present in The University of Texas at Austin School of Architecture.

### Study Abroad and Internship Opportunities

The School of Architecture encourages first-hand experiences of diverse peoples, places and cultures, nationally and internationally, so that we might better engage the world in which we live. Educational travel experiences can be integrated into degree plans in several ways, including, but not limited to, the following:

Study in Italy is a semester at the Santa Chiara Study Center in Tuscany, approximately an hour's drive from Florence. The program allows for an intensive study of design, history, and visual communication, while the center's historic structure provides a congenial campus environment and a base for travel throughout Italy.

The Europe/Paris Program is a semester of study that emphasizes a broad and integrated experience covering the buildings and landscapes as well as the urban fabric across Europe. With a unique itinerary every fall, the program gives students special study opportunities with regard to design, history, and visual communication in each city visited.

Studio Mexico is a biennial advanced studio for architecture and landscape architecture students that explores the rich cultural and built environment of Mexico. During a nine-day trip to Mexico, students visit a project site and other significant places, and enjoy rich interaction with Mexican students working on the same project. Students participating in the studio are encouraged to take the Mexican architecture class taught by Professor Juan Miró, either concurrently with the studio or in the previous year.

The Professional Residency Program provides upper-level architecture students with a unique opportunity to expand their education through work experience in the architectural profession. The program has provided work experience to honors students in the school since 1974, and over the past decades our students have been linked with over 300 firms in 30 countries.

## **Admission and Registration**

#### Admission

Admission and readmission of undergraduate students to the University is the responsibility of the director of admissions. Information about admission to the University is given in *General Information* (http:// catalog.utexas.edu/general-information/admission/undergraduate-admission).

Students who are not admitted to the School of Architecture may not pursue any degree offered by the school. Information about admission is published by the school at http://soa.utexas.edu/.

The School of Architecture is one of the smallest academic units at The University of Texas at Austin. Our undergraduate student body exemplifies the diverse constitution of the communities we strive to serve. In support of unique perspectives and experiences, all applications are reviewed with an understanding that excellence may manifest itself in many areas and may be expressed in different forms, such as compelling essays, strong academic preparation, extracurricular activities, excellent test scores, life experiences, as well as other accomplishments.

#### **Freshman Admission**

The School of Architecture is unable to accommodate all qualified applicants, and preference is given to candidates considered to have best demonstrated the interest, aptitude, and dedication to pursuing a design education. All applicants are evaluated with emphasis on the following areas: SAT or ACT scores, class rank, essays, academic preparation, extracurricular activities, and other achievements. Texasresident high school students have priority over nonresidents in admission decisions. All applicants must fulfill the high school unit requirements given in *General Information*.

To be considered for admission to the School of Architecture, applicants should select the appropriate degree program on the ApplyTexas application: architecture, interior design, the architecture/architectural engineering dual degree program, the architecture/Plan II dual degree program, architectural studies, or architectural studies with an emphasis on architectural history. All application materials must be submitted to the Office of Admissions by the deadline to apply for admission to the University for the fall semester; this date is given in *General Information*. Applicants to the dual degree program offered with the Plan II Honors Program must submit an additional application; more information about Plan II (p. 384) is provided within the Liberal Arts section of the *Undergraduate Catalog*.

#### Transfer

#### **Internal Transfer**

Students currently or formerly enrolled in other University degree programs who wish to enroll in a degree program in the School of Architecture must complete an online Internal Transfer Application by the spring semester deadline to be considered for admission for the following fall semester. To be eligible to apply for internal transfer, students must have completed a minimum of 24 semester hours of credit in residence (excluding credit-by-exam) by the end of a spring semester, with a University grade point average of at least 3.25. Emphasis is given to strong performance in University courses, especially courses relevant to the degree program to which the applicant is applying. Meeting these requirements is no guarantee for admission.

#### **External Transfer**

Transfer applicants from architecture and interior design programs in other universities will be evaluated with emphasis given to excellence in design (portfolio required), academic preparation, essays, and other achievements. Course credit and placement in studio sequence is determined upon acceptance. External transfer admission is offered to a few qualified applicants each year.

Students applying to transfer from another university to the School of Architecture should select the appropriate degree program on the ApplyTexas application. All application materials must be submitted to the Office of Admissions by the deadline to apply for admission to the University for the fall semester; this date is given in *General Information* (http://catalog.utexas.edu/general-information/admission/ undergraduate-admission). To be considered for transfer admission to the School of Architecture, the applicant must have completed at least 30 semester hours of transferable college coursework with a grade point average of at least 3.25, and must submit a portfolio which includes architecture or interior design studio work from another university; information about the portfolio is given on the University's transfer admission website (http://soa.utexas.edu/apply/undergraduateadmissions/external-transfer-faq). All admission decisions are made before the end of the spring semester; the Office of Admissions cannot consider spring coursework in progress.

#### Transfer Credit

External transfer students with credit from another school must submit samples of their design work and, if applicable, visual communication work, transcripts, course descriptions and/or syllabi for courses in their majors. On the basis of the information submitted, the undergraduate dean's office determines the level at which students enter the design sequence and assigns credit toward the degree if appropriate.

## Registration

*General Information* (http://catalog.utexas.edu/general-information/ registration-tuition-and-fees) gives information about registration, adding and dropping courses, transfer from one division of the University to another, and auditing a course. The online *Course Schedule* (http:// registrar.utexas.edu/schedules), published before registration each semester and summer session, includes registration instructions, advising locations, and the times, places, and instructors of classes. The *Course Schedule* and *General Information* are published on the registrar's website (http://registrar.utexas.edu).

Students should carefully verify that they have completed all course prerequisites, should consult the undergraduate dean's office, and should be sure to include in each semester's work the courses that are prerequisites for those to be taken in later semesters.

# Minimum Number of Hours in the Long Session

Students must register each semester for at least 12 semester hours of coursework prescribed for the degree. Registration for fewer hours must be approved by the undergraduate dean's office.

#### **Third-Year Portfolio Review Requirement**

#### Architecture:

At the end of the fall semester of the third year, all students pursuing architecture degrees are required to submit a portfolio that summarizes the work completed in all previous design and visual communication courses. Guidelines for submission of the portfolio, including deadline, are available from the undergraduate dean's office.

Students pursuing a Bachelor of Architecture must submit an updated portfolio at the end of the spring semester of the third year.

The successful completion of the four Intermediate Studios (Architecture 320D, 520E, 520F, and 520G) and a satisfactory Portfolio Review at the end of the spring semester of the third year or a subsequent semester are required for entry into Architecture 561R, *Advanced Design* or ARC 561C Comprehensive Studio. The portfolio provides critical information to the reviewing committee in evaluating the student's progress toward the degree. The reviewing committee, at its discretion, may require the student to retake Architecture 520F, *Intermediate Studio III* and participate in an additional Portfolio Review at the end of the fall semester of the fourth year prior to registering for advanced studios.

#### Interior Design:

On the first day of class in the second semester of the third year, students entering Architectural Interior Design 530T, *Design VI– Interiors* are required to submit a portfolio that summarizes the work completed in all the previous design and visual communication courses. Guidelines for submission of the portfolio, including deadline, are available from the undergraduate dean's office.

A successful completion of the Architectural Interior Design 530T, *Design VI–Interiors* studio and a satisfactory Third-Year Portfolio Review are required for entry into Architectural Interior Design 560R, *Advanced Interior Design*. The portfolio provides critical information to the reviewing committee in evaluating the student's progress toward the degree. The reviewing committee, at its discretion, may require the student to complete additional work, including courses prior to or after registering for advanced studios.

## Academic Policies and Procedures

## **Equipment and Supplies**

Students are responsible for their own tools and supplies, which include, but are not limited to, laptop computer and software, hand drawing and modeling equipment, and materials. More information on the Student Computer Policy is available at http://soa.utexas.edu/.

## Academic Standards

To progress in all degree programs offered by the School of Architecture and to qualify for graduation, a student must earn a grade of at least *C* in all architecture, interior design, and community and regional planning courses. In a case where a student earns a grade below *C*, the course may only be repeated once.

In the process of fulfilling the requirements for degrees in the School of Architecture, including the core curriculum, students must earn credit for one flag in cultural diversity in the United States, one flag in ethics, one flag in global cultures, one flag in independent inquiry, one flag in quantitative reasoning, and three flags in writing beyond Rhetoric and Writing 306 or its equivalent. Courses used to fulfill flag requirements may be used simultaneously to fulfill other degree requirements. Courses with flags are identified in the *Course Schedule* (http://registrar.utexas.edu/schedules). Students should consult with their academic adviser to determine how to fulfill flag requirements in the process of fulfilling other degree requirements.

## Honors

#### **University Honors**

The designation University Honors, awarded at the end of each longsession semester, gives official recognition and commendation to students whose grades for the semester indicate distinguished academic accomplishment. Both the quality and the quantity of work done are considered. Criteria for University Honors are given in *General Information* (http://catalog.utexas.edu/general-information/academicpolicies-and-procedures/honors).

## **Graduation with University Honors**

Students who, upon graduation, have demonstrated outstanding academic achievement are eligible to graduate with University Honors. Criteria for graduation with University Honors are given in *General Information* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/honors/#universityhonorstext).

## School of Architecture Recognition Awards

	-
Award	Alpha Rho Chi Medal
Donor	Alpha Rho Chi, professional architectural fraternity
Eligibility	Graduating student who has shown an ability for leadership, has performed willing service to the school, and gives promise of professional merit through attitude and personality.
Award	American Institute of Architects' Medal
Donor	American Institute of Architects
Eligibility	Graduating student, in recognition of scholastic achievement, character, and promise of professional ability.
Award	Boone Powell Family Prize in Urban Design
Donor	Boone Powell, Leilah Powell, and the Catherine H. Powell Family
	Trust
Eligibility	Trust Non-graduating undergraduate or graduate student pursuing a degree in architecture or planning from The University of Texas at Austin; based on merit in urban design.
Eligibility Award	Non-graduating undergraduate or graduate student pursuing a degree in architecture or planning from The University of Texas at Austin; based
	Non-graduating undergraduate or graduate student pursuing a degree in architecture or planning from The University of Texas at Austin; based on merit in urban design.

## Graduation

All students must fulfill the general requirements (p. 20) for graduation given in The University section. Students in the School of Architecture must also fulfill the following requirements.

- 1. The University requires that the student complete in residence at least 60 semester hours of the coursework counted toward the degree. In the School of Architecture, 30 of these 60 hours must be in the major or in a field closely related to the major as approved by the dean.
- 2. A candidate for a degree must be registered at the University either in residence or *in absentia* the semester or summer session the degree is to be awarded. Students are encouraged to contact their academic adviser to indicate their intent to graduate at the beginning of the semester or summer session in which they intend to graduate.

## **Degree Audit**

The undergraduate dean's office prepares a degree audit for each currently enrolled student each semester. The degree audit lists the courses the student has taken, the degree requirements he or she has fulfilled, and the requirements that remain to be met. The student may also use the University's interactive degree audit system, IDA, at any time. IDA is available at http://registrar.utexas.edu/students/degrees/ ida/. It is the student's responsibility to know the requirements for the degree as stated in a catalog under which he or she is eligible to graduate and to register so as to fulfill those requirements.

## **Degrees and Programs**

## **Degrees Offered**

Five undergraduate degree programs are offered by the School of Architecture: Bachelor of Architecture; Bachelor of Architecture/Bachelor of Science in Architectural Engineering; Bachelor of Architecture/ Bachelor of Arts, Plan II; Bachelor of Science in Architectural Studies; and Bachelor of Science in Interior Design. Specific requirements and suggested arrangement of courses for each degree program are given under individual major degree requirements.

## **Applicability of Certain Courses**

#### **Extension Courses**

A student in residence may be allowed to take coursework by extension. Credit that the student in residence earned by extension will not be counted toward the degree unless it is approved in advance by the undergraduate dean's office. No more than 30 percent of the semester hours required for any degree may be taken by extension.

#### **Courses Taken on the Pass/Fail Basis**

An undergraduate may count toward the degree up to 15 hours of coursework in electives completed on the pass/fail basis; credit earned by examination is not counted toward the 15 hours. If a student chooses to major in a subject in which he or she has taken a course pass/fail, the major department decides whether the course may be counted toward the student's major requirements. Complete rules on registration on the pass/fail basis are given in *General Information* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/evaluation/#symbolstext).

#### **Physical Activity Courses**

Physical activity (PED) courses are offered by the Department of Kinesiology and Health Education. They may not be counted toward the number of hours required for a degree in the School of Architecture. However, they are counted among courses for which the student is enrolled, and the grades are included in the grade point average.

#### **ROTC Courses**

No more than six semester hours of air force science, military science, or naval science coursework may be counted toward any degree in the School of Architecture. These courses may be used only as lowerdivision electives (in degree programs that have such electives) and only by students who complete the third and fourth years of the ROTC program.

#### **Admission Deficiencies**

Students admitted to the University with deficiencies in high school units must remove them as specified in *General Information* (http:// catalog.utexas.edu/general-information/admission/undergraduate-admission/#freshmanadmissiontext). Course credit used to remove deficiencies may not be counted toward the student's degree.

# Bachelor of Science in Interior Design

As a four-year professional degree, the Bachelor of Science in Interior Design (BSID) is a rigorous design-oriented curriculum with a strong theoretical basis to integrate creative problem-solving skills with an understanding of the aesthetic, technological, and behavioral aspects of design.

## Curriculum

A total of at least 126 hours of coursework is required for the Bachelor of Science in Interior Design.

All students must complete the University's Core Curriculum (p. 23) as well as the courses listed in the following table. In some cases, a course that is required for the BSID degree may also be counted toward the core curriculum; these courses are identified below.

Requirements Architectural Interior Des	ign, Architecture	Hours	
Design			
ARI 310K	Design I		3
ARI 310L	Design II		3
ARI 320K	Design IIIInteriors		3
ARI 520L	Design IVInteriors		5
ARI 530K	Design V-Interiors		5
ARI 530T	Design VIInteriors		5
ARI 560R	Advanced Interior Design (taken twice)		10
Visual communication			
ARI 311K	Visual Communication I		3
ARI 311L	Visual Communication II		3
ARI 221K	Visual Communication III		2
Design theory			
ARI 350R	Topics in Interior Design Theory		3
Interior building systems	and construction		
ARC 415K	Construction I		4
ARI 434K	Construction II–Interior Materials and Assemblies		4
Professional practice			
ARI 362	Interior Design Practice		3
History			
ARI 318K	Interiors and Society		3
ARI 318M	Interior Design History		3
ARI 368R	Interior Design History II		3
ARC 368R	Topics in the History of Architecture		3
Environmental controls			
ARI 324K	Environmental Controls I		3
ARC 334L	Environmental Controls II		3
Human behavior			
ARI 338	Designing for Human Behavior		3
Professional internship			
ARI 130	Interior Design Internship		1
Core Curriculum Require	ments		
РНҮ 309К	Elementary Physics for Nontechnical Students (physics sequence meets part l of the science and technology requirement of the core curriculum)		3
PHY 309L	Elementary Physics for Nontechnical Students		3
PSY 301	Introduction to Psychology (meets the social and behavioral sciences requirement of the core curriculum)		3

ARC 318L

World Architecture: The Industrial Revolution to the Present (meets the visual and performing arts requirement of the core curriculum) 3

#### **Other Requirements**

Art history	3
Electives	6
Additional coursework to satisfy the core curriculum	27
Total Hours	126

# Suggested Arrangement of Courses

First Year			
First Term	Hours Second Term	Hours	
ARI 310K	3 ARI 310L	3	
ARI 311K	3 ARI 311L	3	
ARI 318K	3 RHE 306	3	
Mathematics core course	3 PHY 309K	3	
UGS 302 or 303	3 PSY 301	3	
	15	15	
Second Year			
First Term	Hours Second Term	Hours	
ARI 320K	3 ARI 520L	5	
ARI 221K	2 ARI 434K	4	
ARC 415K	4 ARI 318M	3	
ARC 318L	3 GOV 310L	3	
PHY 309L	3		
	15	15	
Third Year			
First Term	Hours Second Term	Hours Summer Term	Hours
ARI 530K	5 ARI 530T	5 ARI 130	1
ARI 324K	3 ARC 334L	3	
ARI 368R	3 ARI 362	3	
ARI 338	3 E 316L, 316M, 316N, or 316P	3	
HIS 315K	3 Elective	3	
	17	17	1
Fourth Year			
First Term	Hours Second Term	Hours	
ARI 560R	5 ARI 560R	5	
ARC 368R	0.4510505	3	
	3 ARI 350R		
HIS 315L	3 ARI 350R 3 GOV 312L	3	
HIS 315L Science and technology, part II, core course			
Science and technology, part II,	3 GOV 312L	3	

Total credit hours: 126

# **Bachelor of Architecture**

### Curriculum

As a five-year professional degree program, the Bachelor of Architecture features a rigorous design-oriented curriculum with a solid foundation in technology and the history and theory of architecture. The curriculum prepares students for the challenges and demands of professional practice.

A total of at least 161 hours of coursework is required for the Bachelor of Architecture. All students must complete the University's Core Curriculum (p. 23) as well as the courses listed in the following table. In some cases, a course that is required for the BArch may also be counted toward the core curriculum; these courses are identified below.

toward the core carried		
Requirements		Hours
Major Sequence Courses		
Design		
ARC 310K	Design I	3
ARC 310L	Design II	3
ARC 320D	Intermediate Studio I	3
ARC 520E	Intermediate Studio II	5
ARC 520F	Intermediate Studio III	5
ARC 520G	Intermediate Studio IV	5
ARC 561C	Comprehensive Studio	5
ARC 561R	Advanced Design (taken three times)	15
Visual communication		
ARC 311K	Visual Communication I	3
ARC 311L	Visual Communication II	3
ARC 221K	Visual Communication III	2
ARC 361T	Technical Communication	3
Professional experience		
ARC 362	Professional Practice	3
Site design		
ARC 333	Site Design	3
Environmental controls	-	
ARC 334K	Environmental Controls I	3
ARC 334L	Environmental Controls II	3
Construction		
ARC 415K	Construction I	4
ARC 415L	Construction II	4
ARC 435K	Construction III	4
ARC 435L	Construction IV	4
ARC 335M	Construction V	3
History		
ARC 308	Architecture and Society (visual and performing arts)	3
ARC 318K	World Architecture: Origins to 1750	3
ARC 318L	World Architecture: The Industrial Revolution to the Present	3
ARC 342R	Topics in the History of Architecture (taken 3 times. All ARC 342 courses in the series ARC 342C-W may count)	
or ARC 368R	Topics in the History of Architecture	
Community and regional	planning	
CRP 369K	Principles of Physical Planning	3
Other required courses		
M 408C	Differential and Integral Calculus (mathematics)	4
РНҮ 302К	General Physics Technical Course: Mechanics, Heat, and Sound (physics sequence meets part I science and technology)	3
PHY 102M	Laboratory for Physics 302K	1

PHY 302L	General Physics Technical Course: Electricity and Magnetism, Light, Atomic and Nuclear Physics (physics sequence meets part I science and technology)	3
PHY 102N	Laboratory for Physics 302L	1
Electives approved by th	e undergraduate dean's office	15
Core curriculum		
Additional coursework to satisfy the core curriculum		27
Total Hours		161

# Suggested Arrangement of Courses

First Year		
First Term	Hours Second Term	Hours
ARC 310K	3 ARC 310L	3
ARC 311K	3 ARC 311L	3
ARC 308	3 ARC 318K	3
M 408C	4 PHY 302K	3
UGS 302 or 303	3 PHY 102M	1
	RHE 306	3
	16	16
Second Year		
First Term	Hours Second Term	Hours
ARC 320D	3 ARC 520E or 520G	5
ARC 221K	2 ARC 415L	4
ARC 415K	4 ARC 333	3
ARC 318L	3 HIS 315K	3
PHY 302L	3	
PHY 102N	1	
	16	15
Third Year		
First Term	Hours Second Term	Hours
ARC 520F	5 ARC 520G or 520E	5
ARC 435K	4 ARC 435L	4
ARC 334K	3 ARC 334L	3
ARC 342R or 368R (All ARC 342	3 Social and behavioral science core	3
courses in the series ARC 342C-W	course	
may count.)		
Founds Manage	15	15
Fourth Year First Term	User Original Trees	
	Hours Second Term	Hours
ARC 561R	5 ARC 561C	5
ARC 342R or 368R (All ARC 342 courses in the series ARC 342C-W	3 ARC 335M	3
may count.)		
GOV 310L	3 ARC 361T	3
Electives	6 CRP 369K	3
	GOV 312L	3
	17	17
Fifth Year		
First Term	Hours Second Term	Hours
ARC 561R	5 ARC 561R	5
ARC 342R or 368R (All ARC 342	3 ARC 362	3
courses in the series ARC 342C-W		
may count.)		
Science and technology, part II, core	3 HIS 315L	3
course		
E 316L, 316M, 316N, or 316P	3 Electives	6

Elective

3

17

As a six-year dual professional degree program, the Bachelor of Architecture/Bachelor of Science in Architectural Engineering is founded upon the mutual interests of both architecture and architectural engineering.

For admission to the dual degree program, a student must meet the Admission Requirements (p. 32) of the School of Architecture and the requirements given in Admission and Registration (p. 185) for the Cockrell School of Engineering. Students are advised to contact both the School of Architecture and the Cockrell School of Engineering for specific information about the dual degree program.

Students in the dual degree program complete the requirements of the Bachelor of Architecture and the Bachelor of Science in Architectural Engineering degrees. See the descriptions for the five-year Bachelor of Architecture (p. 36) degree program and the Bachelor of Science in Architectural Engineering (p. 195) for more information.

The following outline of courses is the suggested method for completing the requirements for both degrees simultaneously. Dual degree students must also consult the additional requirements of the Bachelor of Science in Architectural Engineering (p. 195) degree. Dual degree students are responsible for fulfilling the requirements of both degrees.

A student who follows the suggested arrangement of courses completes all requirements for both degrees at the end of the spring semester of the sixth year.

### Curriculum

A total of at least 197 hours of coursework is required for this dual degree program.

All students must complete the University's Core Curriculum (p. 23) as well as the courses listed in the following table. In some cases, a course that is required for the dual degree program may also be counted toward the core curriculum; these courses are identified below.

Requirements		Hours
Architecture		
Design		
ARC 310K	Design I	3
ARC 310L	Design II	3
ARC 320D	Intermediate Studio I	3
ARC 520E	Intermediate Studio II	5
ARC 520F	Intermediate Studio III	5
ARC 520G	Intermediate Studio IV	5
ARC 561C	Comprehensive Studio	5
ARC 561R	Advanced Design (taken twice)	10
Visual communication		
ARC 311K	Visual Communication I	3
ARC 311L	Visual Communication II	3
ARC 221K	Visual Communication III	2
ARC 361T	Technical Communication	3

Professional practice		
ARC 362	Professional Practice	3
Site design		
ARC 333	Site Design	3
Construction		
ARC 335M	Construction V	3
History		
ARC 308	Architecture and Society (visual and performing arts)	3
ARC 318K	World Architecture: Origins to 1750	3
ARC 318L	World Architecture: The Industrial Revolution to the Present	3
ARC 342R	Topics in the History of Architecture (taken 3 times. All ARC 342 courses in the series ARC 342C-W may count.)	9
or ARC 368R	Topics in the History of Architecture	
Community and Regiona	-	
CRP 369K	Principles of Physical Planning	3
Engineering and Other De	egree Requirements	
ARE 102	Introduction to Architectural Engineering	1
ARE 217	Computer-Aided Design and Graphics	2
ARE 323K	Project Management and Economics	3
ARE 335	Materials and Methods of Building Construction	3
ARE 346N	Building Environmental Systems	3
ARE 346P	HVAC Design	3
or ARE 371	Energy Simulation in Building Design	
ARE 465	Integrated Design Project	4
ARE 366	Contracts, Liability, and Ethics	3
CH 301	Principles of Chemistry I (part II science and technology)	3
C E 311K	Introduction to Computer Methods	3
C E 311S	Probability and Statistics for Civil Engineers	3
C E 324P	Properties and Behavior of Engineering Materials	3
C E 319F	Elementary Mechanics of Fluids	3
C E 329	Structural Analysis	3
C E 331 or C E 335	Reinforced Concrete Design Elements of Steel Design	3
C E 333T	Engineering Communication	3
C E 357	Geotechnical Engineering	3
E M 306	Statics	3
E M 319	Mechanics of Solids	3
GEO 303	Introduction to Geology	3
GEO 303 M 408C	Differential and Integral Calculus	4
	(mathematics)	
M 408D	Sequences, Series, and Multivariable Calculus	4
M 427J	Differential Equations with Linear Algebra	4
M E 310T	Applied Thermodynamics	3

РНҮ 303К	Engineering Physics I (physics sequence meets part I science and technology)	3
PHY 103M	Laboratory for Physics 303K	1
PHY 303L	Engineering Physics II	3
PHY 103N	Laboratory for Physics 303L	1
Approved mathematics or science elective		
Approved technical electives		9
Additional coursework to satisfy the core curriculum		24
Total Hours		197

# Suggested Arrangement of Courses

First Year

First Year		
First Term	Hours Second Term	Hours
ARC 310K	3 ARC 310L	3
ARC 311K	3 ARC 311L	3
ARC 308	3 ARC 318K	3
ARE 102	1 M 408D	4
M 408C	4 PHY 303K	3
UGS 302 or 303	3 PHY 103M	1
	17	17
Second Year		
First Term	Hours Second Term	Hours
ARC 320D	3 ARC 520E or 520G	5
ARC 221K	2 ARC 333	3
ARC 318L	3 C E 311K	3
E M 306	3 E M 319	3
PHY 303L	3 CH 301	3
PHY 103N	1	
RHE 306	3	
	18	17
Third Year		
First Term	Hours Second Term	Hours
ARC 520F	5 ARC 520G or 520E	5
C E 311S	3 ARE 217	2
C E 329	3 ARE 335	3
C E 324P	3 ARE 346N	3
M E 310T	3 M 427J	4
	17	17
Fourth Year		
First Term	Hours Second Term	Hours
ARC 342R or 368R (All ARC 342 courses in the series ARC 342C-W may count.)	3 ARE 323K	3
C E 319F	3 C E 331 or 335	3
E 316L, 316M, 316N, or 316P	3 C E 357	3
Approved mathematics or science elective	3 CRP 369K	3
Social and behavioral sciences core	3 GOV 310L	3
	15	15
Fifth Year		
First Term	Hours Second Term	Hours
ARC 561C	5 ARE 366	3
ARC 335M	3 ARE 465	4
ARE 346P or 371	3 Approved technical electives	6
C E 333T	3 HIS 315K	3
Approved technical elective	3	
	17	16
Sixth Year		
First Term	Hours Second Term	Hours
ARC 561R	5 ARC 561R	5

	17	14
HIS 315L	3	
GEO 303	3 GOV 312L	3
courses in the series ARC 342C-W may count.)	courses in the series ARC 342C-W may count.)	Ū
ARC 342R or 368R (All ARC 342	3 ARC 342R or 368R (All ARC 342	3
ARC 361T	3 ARC 362	3

Total credit hours: 197

### **Bachelor of Architecture/Bachelor** of Arts, Plan II Dual Degree **Program**

The Bachelor of Architecture/Bachelor of Arts, Plan II, dual degree program is sponsored jointly by the School of Architecture and the College of Liberal Arts. The five-year program, which includes summer sessions, offers the academic and professional advantage of a strong liberal arts background.

Students interested in this program should consult the Plan II Program (p. 384) description given in the College of Liberal Arts.

The following outline of courses is a suggested method for simultaneously completing the requirements for both degree programs. Students should consult their advisers, the lists below, and the Bachelor of Arts, Plan II (p. 384) degree program given in the College of Liberal Arts to ensure that their coursework plans will fulfill all requirements of both degrees.

### Curriculum

A total of at least 186 hours of coursework is required for this dual degree program.

All students must complete the University's Core Curriculum (p. 23) as well as the courses listed in the following table. In some cases, a course that is required for the dual degree program may also be counted toward the core curriculum; these courses are identified below.

Requirements		Hours
Architecture		
Design		
ARC 310K	Design I	3
ARC 310L	Design II	3
ARC 320D	Intermediate Studio I	3
ARC 520E	Intermediate Studio II	5
ARC 520F	Intermediate Studio III	5
ARC 520G	Intermediate Studio IV	5
ARC 561C	Comprehensive Studio	5
ARC 561R	Advanced Design (taken three times)	15
Visual communication		
ARC 311K	Visual Communication I	3
ARC 311L	Visual Communication II	3
ARC 221K	Visual Communication III	2
ARC 361T	<b>Technical Communication</b>	3
Professional practice		
ARC 362	Professional Practice	3
Site design		
ARC 333	Site Design	3
Environmental controls		

	Free in a second s	~
ARC 334K	Environmental Controls I	3
ARC 334L	Environmental Controls II	3
Construction	Or material and	4
ARC 415K	Construction I	4
ARC 415L	Construction II	4
ARC 435K	Construction III	4
ARC 435L	Construction IV	4
ARC 335M	Construction V	3
History		0
ARC 308	Architecture and Society (meets the visual and performing arts requirement of the core curriculum)	3
ARC 318K	World Architecture: Origins to 1750	3
ARC 318L	World Architecture: The Industrial Revolution to the Present	3
ARC 342R	Topics in the History of Architecture (taken 3 times. All ARC 342 courses in the series ARC 342C-W may count)	9
or ARC 368R	Topics in the History of Architecture	
Planning		
CRP 369K	Principles of Physical Planning	3
Other Degree Requireme	nts	
E 303C	Plan II World Literature Part I (meets the English composition requirement of the core curriculum)	3
or T C 303C	Plan II World Literature Part I	
E 303D	Plan II World Literature Part II (meets the humanities requirements of the core curriculum)	3
or T C 303D	Plan II World Literature Part II	
Foreign language as spe	cified for Plan II 16-	18
M 408C	Differential and Integral Calculus (meets the mathematics requirement of the core curriculum)	4
PHL 610Q	Problems of Knowledge and Valuation	6
РНҮ 302К	General Physics Technical Course: Mechanics, Heat, and Sound (physics sequence meets part I of the science and technology requirement of the core curriculum)	3
or PHY 303K	Engineering Physics I	
PHY 102M	Laboratory for Physics 302K	1
or PHY 103M	Laboratory for Physics 303K	
PHY 302L	General Physics Technical Course: Electricity and Magnetism, Light, Atomic and Nuclear Physics	3
or PHY 303L	Engineering Physics II	
PHY 102N or PHY 103N	Laboratory for Physics 302L Laboratory for Physics 303L	1
S S 301	Honors Social Science (meets the	3
	social and behavioral sciences requirement of the core curriculum)	
or S S 302C or S S 302D or S S 302E		

or S S 302F	Honors Social Science: Economics	
T C 302	First-Year Signature Course: Plan II (meets the first-year signature course requirement of the core curriculum)	3
T C 358	Plan II Junior Seminar (taken two times)	6
T C 660H	Thesis Course: Honors	6
BIO 301E	Problems in Modern Biology (counts toward part II of the science and technology requirement of the core curriculum)	3
Natural science elective		3
Elective		3
Additional coursework to	satisfy the core curriculum	12
Total Hours		186-188

# Suggested Arrangement of Courses

First Year

IC 310L IC 311L IC 318K 303D or T C 303D 408C cond Term IC 520E or 520G	3 P+ 3 P+ 3 P+ 4 16	iy 302K iy 102M iy 302L iy 102N	3 1 3 1 8
CC 318K 303D or T C 303D 408C cond Term	3 PF 3 PF 4 16	IY 302L	3
303D or T C 303D 408C cond Term	3 PH 4 16		1
408C cond Term	4	łY 102N	
cond Term	16		8
			8
	Hours Su		
	Hours Su		
IC 520E or 520G		Immer Term	Hours
		reign language quirement for Plan II	10-12
IC 415L	4		
IC 333	3		
C 342R or 368R I ARC 342 courses the series ARC 2C-W may count.)	3		
	15		10-12
cond Term	Hours Su	ımmer Term	Hours
C 520G or 520E			6
IC 435L	4 GC	OV 310L	3
IC 334L	3 GC	OV 312L	3
D 301E	3		
	15		12
cond Term	Hours		
C 561C	5		
IC 335M	3		
IC 361T	3		
IL 610QB	3		
358	3		
	17		
cond Term	Hours		
IC 561R	5		
IC 362	3		
	C 333 C 342R or 368R I ARC 342 courses he series ARC 2C-W may count.) cond Term C 520G or 520E C 435L C 334L 0 301E cond Term C 561C C 335M C 361T L 610QB : 358	C 415L 4 C 333 3 C 342R or 368R 3 LARC 342 courses he series ARC 2C-W may count.) 15 cond Term Hours Su C 520G or 520E 5 C 334L 3 C 335M 3 C 355M	C 333       3         C 342R or 368R       3         I ARC 342 courses       3         he series ARC       20-Winay count.)         15       15         cond Term       Hours Summer Term         C 520G or 520E       5 Foreign language requirement for Plan II         C 435L       4 GOV 310L         C 334L       3 GOV 312L         0 301E       3         cond Term       Hours         C 551C       5         C 335M       3         C 361T       3         :358       3         17         cond Term       Hours         C 561R       5

	17	17	
Elective	3 T C 660HB	3	
Additional natural science course prescribed by the College of Liberal Arts	in the series ARC 342C-W may count.) 3 CRP 369K	3	
T C 660HA	3 ARC 342R or 368R (All ARC 342 courses	3	

Total credit hours: 186-188

# **Bachelor of Science in Architectural Studies**

The four-year, pre-professional Bachelor of Science in Architectural Studies (BSArchStds) degree program, with an optional architectural history track, is an excellent platform for future graduate studies in architecture and associated fields. The required coursework is concentrated in the first three years, leaving the fourth year to develop the student's career interests.

Applicants for admission to this program must fulfill the Requirements for Admission (p. 32) to the School of Architecture.

The Bachelor of Science in Architectural Studies alone does not fulfill the educational requirements for registration as an architect. Students interested in pursuing registration must complete a first-professional degree in architecture.

## Curriculum

A total of at least 125 hours of coursework is required for the Bachelor of Science in Architectural Studies.

All students must complete the University's Core Curriculum (p. 23) as well as the courses listed in the following table. In some cases, a course that is required for the BSArchStds may also be counted toward the core curriculum; these courses are identified below.

Requirements Architecture		Hours	
Design			
ARC 310K	Design I		3
ARC 310L	Design II		3
ARC 320D	Intermediate Studio I		3
ARC 520E	Intermediate Studio II		5
or ARC 520G	Intermediate Studio IV		
ARC 520F	Intermediate Studio III		5
Visual communication			
ARC 311K	Visual Communication I		3
ARC 311L	Visual Communication II		3
ARC 221K	Visual Communication III		2
Design theory			
ARC 327R	Topics in Architectural Theory (All courses in the series ARC 327C-W may count.)		3
or ARC 350R	Topics in Design Theory		
Site design			
ARC 333	Site Design		3
Environmental controls			
ARC 334K	Environmental Controls I		3

Construction		
ARC 415K	Construction I	4
ARC 415L	Construction II	4
ARC 435K	Construction III	4
History		
ARC 308	Architecture and Society (visual and performing arts)	3
ARC 318K	World Architecture: Origins to 1750	3
ARC 318L	World Architecture: The Industrial Revolution to the Present	3
ARC 342R	Topics in the History of Architecture (All courses in the series ARC 342C- W may count.)	3
or ARC 368R	Topics in the History of Architecture	
Other Degree Requirer	nents	
M 408C	Differential and Integral Calculus (meets the mathematics requirement of the core curriculum)	4
PHY 302K	General Physics Technical Course: Mechanics, Heat, and Sound (physics sequence meets part I science and technology)	3
or PHY 303K	Engineering Physics I	
PHY 102M	Laboratory for Physics 302K	1
or PHY 103M	Laboratory for Physics 303K	
PHY 302L	General Physics Technical Course: Electricity and Magnetism, Light, Atomic and Nuclear Physics	3
or PHY 303L	Engineering Physics II	
PHY 102N	Laboratory for Physics 302L	1
or PHY 103N	Laboratory for Physics 303L	
	ities course in literature, foreign or another field approved by the office	3
Philosophy course		3
an admission deficien	uage courses that are used to remove cy may not be used to fulfill this not be counted toward the degree)	20
Additional coursework	to satisfy the core curriculum	27
Total Hours		125

### **Electives**

Twenty-six semester hours of electives are required for the completion of the Bachelor of Science in Architectural Studies degree program. These electives consist of three hours of upper-division coursework in humanities, three hours in philosophy, and 20 additional open elective hours, generally completed outside the School of Architecture. Students pursuing the architectural history track must take 18 of their 20 hours of open electives in architectural history. Up to six hours of related coursework taken at the University, and approved by the program director, may be used to fulfill the elective requirement.

# Suggested Arrangement of Courses

First Year		
First Term	Hours Second Term	Hours
ARC 310K	3 ARC 310L	3
ARC 311K	3 ARC 311L	3

ARC 308	3 ARC 318K	3
M 408C	4 PHY 302K	3
UGS 302 or 303	3 PHY 102M	1
	RHE 306	3
	16	16
Second Year		
First Term	Hours Second Term	Hours
ARC 320D	3 ARC 520E or 520G	5
ARC 221K	2 ARC 415L	4
ARC 415K	4 ARC 333	3
ARC 318L	3 HIS 315K	3
PHY 302L	3	
PHY 102N	1	
	16	15
Third Year		
First Term	Hours Second Term	Hours
ARC 520F	5 ARC 327R or 350R (All ARC 327 courses in the series ARC 327C-W may count.)	3
ARC 435K	4 Electives	12
ARC 334K	3	
ARC 342R or 368R (All ARC 342 courses in the series ARC 342C-W may count.)	3	
	15	15
Fourth Year		
First Term	Hours Second Term	Hours
GOV 310L	3 E 316L, 316M, 316N, or 316P	3
HIS 315L	3 GOV 312L	3
Philosophy course	3 Approved upper-division humanities course	3
Science and technology, part II, core course	3 Electives	8
Social and behavioral sciences core course	3	
	15	17

# **Minor and Certificate Programs**

#### Minor

The transcript-recognized undergraduate academic minor must be completed in conjunction with an undergraduate degree at The University of Texas at Austin. For more information regarding the requirements for achieving a minor, including a comprehensive list of minors, please visit the Minor and Certificate Programs (p. 13) section of the Undergraduate Catalog.

### **The Architectural History Minor**

The Architectural History Minor is designed to provide a foundation in architectural history concepts for students outside of the School of Architecture. Any undergraduate outside of the School of Architecture with a University grade point average of at least 2.50 may take any course listed below, whether pursuing the Architectural History Minor or not. Students may obtain only one minor from the School of Architecture.

Students who know they intend to complete the Architectural History minor should apply online at the earliest possible date; deadlines are March 1 for fall or summer, and October 1 for spring.

To fulfill the Architectural History Minor students must complete 15 semester hours of coursework as described below. At least half of the coursework must be completed in residence at The University of Texas at Austin. All coursework must be taken on the letter-grade basis, and

completed in conjunction with the students' major requirements. Six hours must be upper-division.

Registration for upper-division courses will require successful completion of 60 semester hours of coursework.

Students pursuing the Architectural History Minor may choose from among the following courses:

Requirements Lower-division		Hours
ARC 308	Architecture and Society	
ARC 309W	Frank Lloyd Wright: Organic Architecture	
ARC 318K	World Architecture: Origins to 1750	
ARC 318L	World Architecture: The Industrial Revolution to the Present	
Unner division		

#### Upper-division

All Architecture 342 courses (Architecture 342C through Architecture 342W)

In addition to the above courses students also may count any unnumbered advanced architectural history topics courses (Architecture 368R) completed prior to Fall 2016. Appropriate architecture theory courses, such as Architecture 327C through Architecture 327U or Architecture 350R topics courses, may count toward the minor by petition.

#### The Architectural Studies Minor

The Architectural Studies Minor is designed to provide a foundation in architecture concepts for students in majors outside of the School of Architecture. Any undergraduate outside of the School of Architecture with a University grade point average of at least 2.50 may take any course listed below, whether pursuing the Architectural Studies Minor or not. Students may obtain only one minor from the School of Architecture. Students who know they intend to complete the Architectural Studies Minor should apply online at the earliest possible date; deadlines are March 1 for fall or summer, and October 1 for spring.

To fulfill the Architectural Studies Minor, students must complete 15 semester hours of coursework as described below. At least half of the coursework must be completed in residence at The University of Texas at Austin. All coursework must be taken on the letter-grade basis, and completed in conjunction with the students' major requirements. Six hours must be upper-division.

Registration for upper-division courses will require successful completion of 60 semester hours of coursework. Please see the *Course Schedule* (http://registrar.utexas.edu/schedules) to determine if instructor permission is required.

Students pursuing the Architectural Studies Minor may choose from among the following courses:

Requirements Lower-division		Hours	
ARC 308	Architecture and Society		3
ARC 309W	Frank Lloyd Wright: Organic Architecture		3
ARC 318K	World Architecture: Origins to 1750		3
ARC 318L	World Architecture: The Industrial Revolution to the Present		3
Unner division			

#### Upper-division

Architecture 327C through 327W courses

Architecture 342C through 342W courses		
ARC 350R	Topics in Design Theory (Topic 1, 2, 3 OR 4)	3
CRP 369K	Principles of Physical Planning	3

In addition to the above courses, former architecture majors may use other architecture courses completed while in the School of Architecture toward their coursework for the Architectural Studies Minor. Unnumbered architecture topics courses (Architecture 350R and 368R) completed prior to Fall 2016 also may count.

### The Interior Design Minor

3

3

3

3

The Interior Design Minor is designed to provide a foundation in interior design and architecture concepts for students outside of the School of Architecture. Any undergraduate outside of the School of Architecture with a University grade point average of at least 2.50 may take any course listed below, whether pursuing the Interior Design Minor or not. Students may obtain only one minor from the School of Architecture. Please see the *Course Schedule* (http://registrar.utexas.edu/schedules) to determine if instructor permission is required.

Students who know they intend to complete the Interior Design minor should apply online at the earliest possible date; deadlines are March 1 for fall or summer, and October 1 for spring.

To fulfill the Interior Design Minor students must complete 15 semester hours of coursework as described below. At least half of the coursework must be completed in residence at The University of Texas at Austin. All coursework must be taken on the letter-grade basis, and completed in conjunction with the students' major requirements. Six hours must be upper-division.

Registration for upper-division courses will require successful completion of 60 semester hours of coursework.

Students pursuing the Interior Design Minor may choose from among the following courses:

Requirements		Hours	
Lower-division			
ARI 318K	Interiors and Society		3
ARI 318M	Interior Design History		3
ARC 308	Architecture and Society		3
ARC 309W	Frank Lloyd Wright: Organic Architecture		3
ARC 318K	World Architecture: Origins to 1750		3
ARC 318L	World Architecture: The Industrial Revolution to the Present		3
Upper-division			
ARI 338	Designing for Human Behavior		3
ARI 368R	Interior Design History II		3
Architectural Interior Des	ign 342C through 342W courses		
Architecture 342C throug	Jh 342W courses		

In addition to the above courses, former interior design majors may use other interior design and architecture courses completed while in the School of Architecture toward their coursework for the Interior Design Minor. Unnumbered interior design or architecture topics courses (Architectural Interior Design 350R or Architecture 350R) completed prior to Fall 2016 also may count.

### The Landscape Studies Minor

The Landscape Studies Minor is designed to provide a foundation in landscape studies concepts for students outside of the School of Architecture. Any undergraduate outside of the School of Architecture with a University grade point average of at least 2.5 may take any course listed below, whether pursuing the Landscape Studies Minor or not. Students may obtain only one minor from the School of Architecture.

Students who know they intend to complete the Landscape Studies minor should apply online at the earliest possible date; deadlines are March 1 for fall or summer, and October 1 for spring.

To fulfill the Landscape Studies Minor students must complete 15 semester hours of coursework as described below. At least half of the coursework must be completed in residence at The University of Texas at Austin. All coursework must be taken on the letter-grade basis, and completed in conjunction with the students' major requirements. Six hours must be upper-division.

Registration for upper-division courses will require successful completion of 60 semester hours of coursework.

Students pursuing the Landscape Studies Minor may choose from among the following courses:

Requirements Lower-division		Hours	
ARC 318K	World Architecture: Origins to 1750		3
ARC 318L	World Architecture: The Industrial Revolution to the Present		3
Upper-division			
ARC 327C	Urban Design History, Theory, and Criticism		3
ARC 327R	Topics in Architectural Theory (All ARC 327 courses in the series ARC 327C-W.)		3
ARC 327R	Topics in Architectural Theory (Topic 6)		3
ARC 328Q	Rendering and Animation for the Built Environment		3
ARC 342C	Mexican Architecture and Urbanism: From Pre-Columbian to Contemporary		3
ARC 342E	History and Theories of Landscape Architecture I		3
ARC 342F	History and Theories of Landscape Architecture II		3
ARC 342J	Originality and Tradition in Baroque Rome: Borromini		3
ARC 342K	Representing Landscape and Architecture, 1500-2015		3
ARC 342R	Topics in the History of Architecture (All ARC 342 courses in the series ARC 342C-W.)	2	3

In addition to the above courses students also may count any unnumbered advanced architectural history topics courses (Architecture 368R) and architectural theory courses (Architecture 350R) completed prior to Fall 2016.

### Courses

The faculty has approval to offer the following courses in the academic years 2018-2019 and 2019-2020; however, not all courses are taught each semester or summer session. Students should consult the *Course Schedule* at http://registrar.utexas.edu/schedules/ to determine which courses and topics will be offered during a particular semester or summer session. The *Course Schedule* may also reflect changes made to the course inventory after the publication of this catalog. For current information, students should consult the schedule posted in the School of Architecture.

A full explanation of course numbers is given in *General Information* (http://catalog.utexas.edu/general-information). In brief, the first digit of a course number indicates the semester hour value of the course. The second and third digits indicate the rank of the course: if they are 01 through 19, the course is of lower-division rank; if 20 through 79, of upper-division rank; if 80 through 99, of graduate rank.

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

### Architectural Interior Design: ARI

#### **Lower-Division Courses**

#### ARI 310K. Design I.

Same as Architecture 310K. Restricted to students in the School of Architecture. An introduction to the forms and methods of design for architects and interior designers, with an emphasis on inhabitation including body, light, and movement. Taught in a studio format by faculty members under the direction of a faculty coordinator. Three lecture hours and six laboratory hours a week for one semester. Offered on the lettergrade basis only. Prerequisite: Registration for Architectural Interior Design 311K or Architecture 311K.

#### ARI 310L. Design II.

Same as Architecture 310L. Restricted to students in the School of Architecture. An introduction to the forms and methods of design for architects and interior designers, with an emphasis on environment, including color, material, and texture. Taught in a studio format by faculty members under the direction of a faculty coordinator. Three lecture hours and six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Architecture 310K and 311K or Architectural Interior Design 310K and 311K with a grade of at least C in each, and registration for Architecture 311L or Architectural Interior Design 311L.

#### ARI 311K. Visual Communication I.

Same as Architecture 311K. Restricted to students in the School of Architecture. Study and application of drawing and other communication skills for designers, including formal and spatial studies, life drawing, and perspective. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: Registration for Architectural Interior Design 310K or Architecture 310K.

#### ARI 311L. Visual Communication II.

Same as Architecture 311L. Restricted to students in the School of Architecture. Study and application of drawing and other communication skills for designers, including color, light and shadow, and projections. Employs manual and digital techniques. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: Architecture 310K and 311K or Architectural Interior Design 310K and 311K with a grade of at least C in each, and registration for Architecture 310L or Architectural Interior Design 310L.

#### ARI 318K. Interiors and Society.

Concepts, principles, and elements of interior design, presented in artistic, philosophical, and professional contexts. Includes a basic historical overview of the development of interior design. Three lecture hours a week for one semester. Prerequisite: For students in the School of Architecture, none; for others, consent of instructor.

#### ARI 318M. Interior Design History.

Survey of interior design from antiquity through the eighteenth century, including theoretical, social, technical, and environmental forces. Three lecture hours a week for one semester. Prerequisite: Architectural Interior Design 318K with a grade of at least C.

#### **Upper-Division Courses**

#### ARI 320K. Design III--Interiors.

Restricted to students in the School of Architecture. Focus on the physical and psychological needs of the inhabitants of interior space, with an emphasis on conceptual process and diagrammatic techniques. Projects deal with real building situations and introduce implications of fenestration, structure, and materials. Nine hours of lecture and studio a week for one semester. Prerequisite: The following coursework with a grade of at least C in each: Architectural Interior Design 310L and 311L; or Architecture 310L and 311L; and registration for Architectural Interior Design 221K or Architecture 221K.

#### ARI 520L. Design IV--Interiors.

Restricted to students in the School of Architecture. Explores linkages between multiple interior spaces and the study of spatial thresholds. Investigates individual spaces in relation to the body and the surrounding environment, utilizing a clearly defined program. Fifteen hours of lecture and studio a week for one semester. Prerequisite: Architectural Interior Design 320K, Architecture 415K, and Architectural Interior Design 221K or Architecture 221K, with a grade of at least C in each.

#### ARI 221K. Visual Communication III.

Same as Architecture 221K. Restricted to students in the School of Architecture. Introduction to digital modeling as well as principles of digital fabrication. Includes various modes of output such as drawings, renderings, and physical models. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: The following coursework with a grade of at least C in each: Architectural Interior Design 310L and 311L, or Architecture 310L and 311L; and registration for Architectural Interior Design 320K or Architecture 320D (or 320K).

#### ARI 324K. Environmental Controls I.

Same as Architecture 334K. Restricted to students in the School of Architecture. A survey of acoustics, color, light, illumination, and electrical and information systems in architectural interiors. Includes techniques of documentation. Three lecture hours and three laboratory hours a week for one semester. Architectural Interior Design 324K and Architecture 334K may not both be counted. Prerequisite: Architectural Interior Design 520L or Architecture 520E (or 520L) or 520G (or 530T) with a grade of at least C.

#### ARI 327D. Supraficial.

Same as Architecture 327D. Experimental application of digital tools, including software and hardware to develop new tactics for the design and fabrication of buildings. Three lecture hours a week for one semester. Only one of the following may be counted: Architecture 327D, 350R (Topic: Supraficial), Architectural Interior Design 327D. Offered on the letter-grade basis only. Prerequisite: For students in the School of

Architecture, upper-division standing; for others, upper-division standing and consent of instructor.

#### ARI 327P. Productions.

Same as Architecture 327P. Designed to explore the relationships between the generation of form, space, experience, and atmosphere in the spatial practices of interior design, architecture, and art. Three lecture hours a week for one semester. Only one of the following may be counted: Architecture 327P, 350R (Topic: Productions), Architectural Interior Design 327P. Prerequisite: For students in the School of Architecture, upper-division standing; for others, upper-division standing and consent of instructor.

#### ARI 328P. Prototype.

Same as Architecture 328P. Focus on digital fabrication as a link between architecture and product design. The equivalent of three lecture hours a week for one semester. Only one of the following may be counted: Architecture 328P, 351R (Topic: Prototype), Architectural Interior Design 328P. Offered on the letter-grade basis only. Prerequisite: Upper-division standing and Architecture 520L with a grade of at least C, or consent of instructor.

#### ARI 130. Interior Design Internship.

Restricted to students in the School of Architecture. Practical application of design procedures in a professional design office. At least 250 hours of work in one semester. Prerequisite: Architectural Interior Design 530T.

#### ARI 530K. Design V--Interiors.

Restricted to students in the School of Architecture. Examination of the elements of interior space and scale, including specific human factors. Particular emphasis on the design, documentation, production, and placement of objects in interiors. Fifteen hours of lecture and studio a week for one semester. Prerequisite: Architectural Interior Design 520L and 434K with a grade of at least C in each.

#### ARI 530T. Design VI--Interiors.

Restricted to students in the School of Architecture. Capstone studio with specific design projects from current markets. Application of code issues, regulatory restraints, fire safety, and regulations for accessibility in interiors. Fifteen hours of lecture and studio a week for one semester. Prerequisite: Architectural Interior Design 324K and 530K with a grade of at least C in each.

#### ARI 434K. Construction II--Interior Materials and Assemblies.

Restricted to students in the School of Architecture. Core concepts in interior materials, assemblies, and systems. Includes material properties, environmental and sustainable issues, attachment, detailing, and product specifications. Projects encourage manipulation and assembly of various material systems. Case studies using material samples, and field trips to sites of fabrication. Six hours of lecture and laboratory a week for one semester. Prerequisite: Architecture 415K with a grade of at least C.

#### ARI 338. Designing for Human Behavior.

Issues of mood, privacy, perception, proxemics, and preferences applied to the design of interiors. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### ARI 342D. Frank Lloyd Wright: Design, Method, Theory.

Same as Architecture 342D. A comprehensive study of Frank Lloyd Wright's life and work with emphasis on the analyses of his design methods and theories. Three lecture hours a week for one semester. Only one of the following may be counted: Architecture 342D, 368R (Topic: Frank Lloyd Wright), Architectural Interior Design 342D. Offered on the letter-grade basis only.

# ARI 342G. The American Home: Identity, Process, and Marketing.

Same as Architecture 342G. An examination of how American housing is conceived, developed, and marketed, as well as the relationships between home buyers and builders. Three lecture hours a week for one semester. Only one of the following may be counted: Architecture 342G, 368R (Topic: American Home), Architectural Interior Design 342G. Offered on the letter-grade basis only. Prerequisite: Upper-division standing; for students in the School of Architecture, Architecture 318L with a grade of at least C.

#### ARI 350R. Topics in Interior Design Theory.

Seminar in a variety of topics. Designed to broaden the student's knowledge of interior design and to encourage critical and theoretical thinking in the discipline. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: For students in the School of Architecture, upper-division standing; for others, upper-division standing and consent of instructor.

#### ARI 560R. Advanced Interior Design.

Restricted to students in the School of Architecture. Synthesis of components covered in other interior design courses, such as human aspects, place-making, the interior envelope, transitional spaces, and conceptual processes. Fifteen hours of lecture and studio a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Architectural Interior Design 530T with a grade of at least C and satisfactory completion of a third-year portfolio review.

#### ARI 362. Interior Design Practice.

Restricted to students in the School of Architecture. Business procedures, professional practice, design project control and management, and professional ethics. Documents procedures for interior design. Three lecture hours a week for one semester. Prerequisite: Upperdivision standing or consent of instructor.

#### ARI 368R. Interior Design History II.

Study of function and aesthetics, and decoration and use, emphasizing interiors from the nineteenth century to the present. Three lecture hours a week for one semester. Prerequisite: Architectural Interior Design 318M with a grade of at least C.

# ARI 368S. Topics in the History of Architecture and Architectural Interior Design.

Seminars and lecture/seminars on advanced topics in the history of architectural interior design. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; and for students in the School of Architecture, Architecture 318L with a grade of at least C; for others, consent of instructor.

#### ARI 279, 379. Interior Design Research.

Investigation of problems selected by the student with approval of the supervising instructor. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. Prerequisite: Upper-division standing and consent of instructor and the dean.

### Architecture: ARC

#### **Lower-Division Courses**

#### ARC 001F. First-Year Interest Group Seminar.

Restricted to students in the First-Year Interest Group Program. Basic issues in various School of Architecture disciplines. One lecture hour a week for one semester.

#### ARC 308 (TCCN: ARCH 1311). Architecture and Society.

Introduction to the social contexts, potential, and consequences of architecture and interior design. Three lecture hours and one laboratory hour a week for one semester.

#### ARC 309W. Frank Lloyd Wright: Organic Architecture.

Overview of Frank Lloyd Wright's complex vision of organic architecture. Focus on how architecture operates, familiarity with Wright's work, an introduction to concepts of organic design, and a synthetic view of his contributions to American and global cultures. Three lecture hours and one discussion hour a week for one semester. Offered on the letter-grade basis only.

#### ARC 310K. Design I.

Same as Architectural Interior Design 310K. Restricted to students in the School of Architecture. An introduction to the forms and methods of design for architects and interior designers, with an emphasis on inhabitation including body, light, and movement. Taught in a studio format by faculty members under the direction of a faculty coordinator. Three lecture hours and six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Registration for Architectural Interior Design 311K or Architecture 311K.

#### ARC 310L. Design II.

Same as Architectural Interior Design 310L. Restricted to students in the School of Architecture. An introduction to the forms and methods of design for architects and interior designers, with an emphasis on environment, including color, material, and texture. Taught in a studio format by faculty members under the direction of a faculty coordinator. Three lecture hours and six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Architecture 310K and 311K or Architectural Interior Design 310K and 311K with a grade of at least C in each, and registration for Architecture 311L or Architectural Interior Design 311L.

#### ARC 311K. Visual Communication I.

Same as Architectural Interior Design 311K. Restricted to students in the School of Architecture. Study and application of drawing and other communication skills for designers, including formal and spatial studies, life drawing, and perspective. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: Registration for Architectural Interior Design 310K or Architecture 310K.

#### ARC 311L. Visual Communication II.

Same as Architectural Interior Design 311L. Restricted to students in the School of Architecture. Study and application of drawing and other communication skills for designers, including color, light and shadow, and projections. Employs manual and digital techniques. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: Architecture 310K and 311K or Architectural Interior Design 310K and 311K with a grade of at least C in each, and registration for Architecture 310L or Architectural Interior Design 310L.

#### ARC 415K. Construction I.

Restricted to students in the School of Architecture. Introduction to building construction, materials, and structures. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: The following coursework with a grade of at least C in each: Architectural Interior Design 310L and 311L, or Architecture 310L and 311L; and registration for Architectural Interior Design 320K or Architecture 320D (or 320K).

#### ARC 415L. Construction II.

Restricted to students in the School of Architecture. Analysis of building assemblies, envelope design, and structures. Three lecture hours

and three laboratory hours a week for one semester. Prerequisite: Architecture 415K with a grade of at least C; Mathematics 408C or 408K; and Physics 302K and 102M, or 303K and 103M.

# ARC 318K (TCCN: ARCH 1301). World Architecture: Origins to 1750.

Comparative study of the architecture of the ancient world, including Asia, Africa, the Americas, and Europe. Three lecture hours and one laboratory hour a week for one semester. Prerequisite: For students in the School of Architecture, Architecture 308 with a grade of at least C.

# ARC 318L (TCCN: ARCH 1302). World Architecture: The Industrial Revolution to the Present.

Three lecture hours a week for one semester. Prerequisite: For students in the School of Architecture, Architecture 318K with a grade of at least C; for others, twelve semester hours of college coursework is recommended.

#### ARC 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Architecture.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the academic advising coordinator in the School of Architecture. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May not be counted toward a degree in the School of Architecture. May be repeated for credit when the topics vary.

#### **Upper-Division Courses**

#### ARC 320D. Intermediate Studio I.

Restricted to students in the School of Architecture. Intermediate-level studio emphasizing formal exploration of parametric design, definition of enclosure, digital fabrication, spatial and formal composition, etc. through possibilities of software. Taught in a studio format by faculty members under the direction of a faculty coordinator. Nine hours of studio a week for one semester. Architecture 320D and 320K may not both be counted. Prerequisite: Architecture 310L and 311L with a grade of at least C in each. Registration for Architecture 221K or Architectural Interior Design 221K.

#### ARC 520E. Intermediate Studio II.

Restricted to students in the School of Architecture. Intermediate-level studio emphasizing landscape, urban issues, housing, and developing design ability in relationship to city and nature. Taught in a studio format by faculty members under the direction of a faculty coordinator. Fifteen studio hours a week for one semester. Architecture 520E and 520L may not both be counted. Prerequisite: Architecture 320D (or 320K); Architecture 221K or Architectural Interior Design 221K; and Architecture 415K with a grade of at least C in each.

#### ARC 520F. Intermediate Studio III.

Restricted to students in the School of Architecture. Intermediate-level studio emphasizing tectonic expression through structural systems, construction methods and materiality, assembly, spatial and formal compositions, etc. Taught in a studio format by faculty members under the direction of a faculty coordinator. Fifteen studio hours a week for one semester. Architecture 520F and 520M may not both be counted. Prerequisite: Architecture 520E or 520G; 415L; and 333 with a grade of at least C in each.

#### ARC 520G. Intermediate Studio IV.

Restricted to students in the School of Architecture. Intermediatelevel studio emphasizing theory, raison-d'etre, program, and overlaps with other disciplines. Taught in a studio format by faculty members under the direction of a faculty coordinator. Fifteen studio hours a week for one semester. Architecture 520G and 530T may not both be counted. Prerequisite: Architecture 320D (or 320K); Architecture 221K or Architectural Interior Design 221K; and Architecture 415K with a grade of at least C in each.

#### ARC 221K. Visual Communication III.

Same as Architectural Interior Design 221K. Restricted to students in the School of Architecture. Introduction to digital modeling as well as principles of digital fabrication. Includes various modes of output such as drawings, renderings, and physical models. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: The following coursework with a grade of at least C in each: Architectural Interior Design 310L and 311L, or Architecture 310L and 311L; and registration for Architectural Interior Design 320K or Architecture 320D (or 320K).

#### ARC 327C. Urban Design History, Theory, and Criticism.

Study of critical theories and practices that affect the built environment. Three lecture hours a week for one semester. Architecture 327C and 350R (Topic: Urban Design History/Theory/Criticism) may not both be counted. Prerequisite: For students in the School of Architecture, upperdivision standing; for others, upper-division standing and consent of instructor.

#### ARC 327D. Supraficial.

Same as Architectural Interior Design 327D. Experimental application of digital tools, including software and hardware to develop new tactics for the design and fabrication of buildings. Three lecture hours a week for one semester. Only one of the following may be counted: Architecture 327D, 350R (Topic: Supraficial), Architectural Interior Design 327D. Offered on the letter-grade basis only. Prerequisite: For students in the School of Architecture, upper-division standing; for others, upper-division standing and consent of instructor.

#### ARC 327E. Alternative Real Estate Action.

Intersects theory and practice by performing design-build, community service/community engagement as a form of alternative real estate development. Three lecture hours a week for one semester. Architecture 327E and 350R (Topic: Alternative Real Estate Action) may not both be counted. Prerequisite: Upper-division standing.

#### ARC 327F. American Dream: Status Quo and Alternatives.

Same as Urban Studies 352 (Topic 2). Three lecture hours a week for one semester. Architecture 327F and Urban Studies 352 (Topic 2) may not both be counted.

#### ARC 327G. Regenerative Architecture.

Three lecture hours a week for one semester. Architecture 327G and 350R (Topic: Regenerative Architecture) may not both be counted. Prerequisite: Upper-division standing.

#### ARC 327J. Theory of Architecture I.

Three lecture hours a week for one semester. Architecture 327J and 350R (Topic: Theory of Architecture I) may not both be counted. Prerequisite: Upper-division standing.

#### ARC 327P. Productions.

Same as Architectural Interior Design 327P. Designed to explore the relationships between the generation of form, space, experience, and atmosphere in the spatial practices of interior design, architecture, and art. Three lecture hours a week for one semester. Only one of the following may be counted: Architecture 327P, 350R (Topic: Productions), Architectural Interior Design 327P. Prerequisite: For students in the

School of Architecture, upper-division standing; for others, upper-division standing and consent of instructor.

#### ARC 327R. Topics in Architectural Theory.

Advanced topics in architecture and associated disciplines to encourage critical and theoretical thinking. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 1: Architectural Criticism.** Architecture 327R (Topic 1) and 350R (Topic: Architectural Criticism) may not both be counted.

**Topic 2: Architectural Photography.** Architecture 327R (Topic 2) and 350R (Topic: Architectural Photography) may not both be counted. **Topic 3: City as Form and Idea.** Architecture 327R (Topic 3) and 350R (Topic: City as Form and Idea) may not both be counted.

**Topic 4: Community Design Engagement.** Architecture 327R (Topic 4) and 350R (Topic: Community Design Engagement) may not both be counted.

Topic 5: Design Firm Leadership. Architecture 327R (Topic 5) and 350R (Topic: Design Firm Leadership) may not both be counted. Topic 6: Design of New Communities. Architecture 327R (Topic 6) and 350R (Topic: Design of New Communities) may not both be counted. Topic 7: Design Process. Architecture 327R (Topic 7) and 350R (Topic: Design Process) may not both be counted.

**Topic 8: Designing the Way We Build.** Architecture 327R (Topic 8) and 350R (Topic: Designing the Way We Build) may not both be counted. **Topic 9: Eileen Gray and E. 1027.** Architecture 327 (Topic 9) and 350R (Topic: Eileen Gray and E.1027) may not both be counted.

**Topic 10: Energy Modeling and The Design Process.** Architecture 327R (Topic 10) and 350R (Topic: Energy Modeling & Design Proc) may not both be counted.

**Topic 11: Global Housing Challenge.** Architecture 327R (Topic 11) and 350R (Topic: Global Housing Challenge) may not both be counted.

**Topic 12: Light and Sustainable Design.** Architecture 327R (Topic 12) and 350R (Topic: Light and Sustainable Design) may not both be counted.

**Topic 13: Managing the Design Project.** Architecture 327 (Topic 13) and 350R (Topic: Managing the Design Project) may not both be counted.

**Topic 14: Place and Historical Imagination.** Architecture 327R (Topic 14) and 350R (Topic: Place & Historical Imagination) may not both be counted.

**Topic 15: Poetics of Building.** Architecture 327R (Topic 15) and 350R (Topic: Poetics of Building) may not both be counted.

**Topic 16: Smart, Green, and Just.** Architecture 327R (Topic 16) and 350R (Topic: Smart, Green, and Just) may not both be counted.

**Topic 17: Solar Geometry/Energy Flow in Building.** Architecture 327R (Topic 17) and 350R (Topic: Solar Geom/Energy Flow in Bldg) may not both be counted.

**Topic 18: Timber Technologies.** Architecture 327R (Topic 18) and 350R (Topic: Timber Technologies) may not both be counted.

**Topic 19: Urban Land Institute Workshop.** Architecture 327R (Topic 19) and 350R (Topic: Urban Land Institute Workshop) may not both be counted.

#### ARC 327U. Technology/Technique Sustainable Design.

Three lecture hours a week per semester. Architecture 327U and 350R (Topic: Technol/Techniq Sustn Dsgn-Ger) may not both be counted. Prerequisite: Upper-division standing.

#### ARC 328D. Advanced Drawing.

Focus on personal design methodology by exploring multiple drawing methods, skills and approaches including manual, digital, and hybrid techniques. Refines design communication skills by pairing clearly articulated design intention with compelling drawings, and expressing them via effective verbal presentations. Three lecture hours or six laboratory hours a week for one semester. Architecture 328D and 351R (Topic: Advanced Drawing: Draw Blood) may not both be counted. Prerequisite: Upper-division standing and Architecture 520L with a grade of at least C, or consent of instructor.

#### ARC 328F. Digital Drawing and Fabrication.

Focus on advanced visual communication methodologies necessary for architectural generation, translation, and output. The equivalent of three lecture hours a week for one semester. Architecture 328F and 351R (Topic: Digital Drawing and Fabrication) may not both be counted. Prerequisite: Architecture 520L with a grade of at least C, or consent of instructor.

# ARC 328G. Design Logics: Projection and Proportion in Architecture.

Three lecture hours a week for one semester. Architecture 328G and 351R (Topic: Dsgn Logics: Proj/Prop Arch) may not both be counted. Prerequisite: Upper-division standing.

#### ARC 328P. Prototype.

Same as Architectural Interior Design 328P. Focus on digital fabrication as a link between architecture and product design. The equivalent of three lecture hours a week for one semester. Only one of the following may be counted: Architecture 328P, 351R (Topic: Prototype), Architectural Interior Design 328P. Offered on the letter-grade basis only. Prerequisite: Upper-division standing and Architecture 520L with a grade of at least C, or consent of instructor.

# ARC 328Q. Rendering and Animation for the Built Environment.

Digital visualization techniques used to model three dimensional environments and motion with digital media. Includes lectures, software demonstrations, and projects that focus on the digital translation of spatial experience, as well as the visualization techniques associated with rendering texture, character, and environment. The equivalent of three lecture hours a week for one semester. Only one of the following may be counted: Architecture 328Q, 328V, 351R (Topic: Visualization and Digital Representation in Design). Prerequisite: Upper-division standing and Architecture 520L with a grade of at least C, or consent of instructor.

#### ARC 328R. Topics in Visualization and Fabrication.

Advanced topics in various methods of visual communication. The equivalent of three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Architecture 520E or 520G with a grade of at least C, or consent of instructor.

#### ARC 328W. Wood Design.

Practice on basic woodworking skills: tool sharpening, layout, millwork, joinery, gluing, sanding, and finishing. The equivalent of three lecture hours a week for one semester. Architecture 328W and 351R (Topic 11) may not both be counted. Prerequisite: Upper-division standing and Architecture 520L with a grade of at least C, or consent of instructor.

#### ARC 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Architecture.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the academic advising coordinator in the School of Architecture. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May not be counted toward a degree in the School of Architecture. May be repeated for credit when the topics vary.

#### ARC 333. Site Design.

Restricted to students in the School of Architecture. History, theory, and technique of landscape design, with emphasis on the relationship of a building to its landscape. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### ARC 334K. Environmental Controls I.

Same as Architectural Interior Design 324K. Restricted to students in the School of Architecture. A survey of acoustics, color, light, illumination, and electrical and information systems in architectural interiors. Includes techniques of documentation. Three lecture hours and three laboratory hours a week for one semester. Architectural Interior Design 324K and Architecture 334K may not both be counted. Prerequisite: Architectural Interior Design 520L or Architecture 520E (or 520L) or 520G (or 530T) with a grade of at least C.

#### ARC 334L. Environmental Controls II.

Restricted to students in the School of Architecture. A survey of heating, ventilating, air conditioning, vertical transportation, and wiring and plumbing systems in buildings, including techniques of documentation. Three lecture hours and one laboratory hour a week for one semester. Prerequisite: Architecture 334K or Architectural Interior Design 324K with a grade of at least C.

#### ARC 435K. Construction III.

Restricted to students in the School of Architecture. Building construction and materials theories; structural component analysis and design. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: Architecture 415L with a grade of at least C; Mathematics 408C or 408L; and Physics 302L and 102N, or 303L and 103N.

#### ARC 435L. Construction IV.

Restricted to students in the School of Architecture. Theories of building behavior and materials; structural system analysis and design. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: Architecture 435K with a grade of at least C.

#### ARC 335M. Construction V.

Restricted to students in the School of Architecture. Advanced analysis of building envelope, assemblies, detailing, and specifications. Three lecture hours a week for one semester. Prerequisite: Architecture 435L with a grade of at least C and registration for ARC 561C.

#### ARC 342C. Mexican Architecture and Urbanism: From Pre-Columbian to Contemporary.

A survey of Mexican architecture and urbanism from its origins in pre-Columbian times to the twenty-first century. Evaluation of architecture as a cultural production intricately connected to its artistic and historical context and the landscape that supports it. Three lecture hours a week for one semester. Only one of the following may be counted: Architecture 342C, 368R (Topic: Mexican Architectural History), 368R (Topic: Mexican Architecture-UT/Mex). Prerequisite: For students in the School of Architecture, Architecture 318L with a grade of at least C; for students in art history, Latin American studies, Mexican American studies, and urban studies, upper-division standing; for all others, consent of instructor.

#### ARC 342D. Frank Lloyd Wright: Design, Method, Theory.

Same as Architectural Interior Design 342D. A comprehensive study of Frank Lloyd Wright's life and work with emphasis on the analyses of his design methods and theories. Three lecture hours a week for one semester. Only one of the following may be counted: Architecture 342D, 368R (Topic: Frank Lloyd Wright), Architectural Interior Design 342D. Offered on the letter-grade basis only.

#### ARC 342E. History and Theories of Landscape Architecture I.

Overview and chronological series of in-depth studies in the history of major garden cultures and designed landscapes of the Western and Eastern worlds. Introduction to methodological approaches to the formal, social, and cultural history of gardens and landscapes, as well as to relevant theoretical frameworks for interpreting these designed landscapes and for use in conceptualizing landscapes, architecture, and urban projects in studio design. Three lecture hours a week for one semester. Architecture 342E and 368R (Topic: History and Theories of Landscape Architecture I) may not both be counted. Prerequisite: Upper-division standing; for students in the School of Architecture, Architecture 318L with a grade of at least C; for others, consent of instructor.

# ARC 342F. History and Theories of Landscape Architecture II.

Continuation of Architecture 342D through the modern period to contemporary times. Formal and cultural history of gardens, parks, and public landscapes from 1700 to about 1990. Includes comparative material from the contemporary period, 1980 to 2010. Three lecture hours a week for one semester. Architecture 342F and 368R (Topic: History and Theories of Landscape Architecture II) may not both be counted. Prerequisite: Upper-division standing; for students in the School of Architecture, Architecture 318L with a grade of at least C; for others, consent of instructor.

# ARC 342G. The American Home: Identity, Process, and Marketing.

Same as Architectural Interior Design 342G. An examination of how American housing is conceived, developed, and marketed, as well as the relationships between home buyers and builders. Three lecture hours a week for one semester. Only one of the following may be counted: Architecture 342G, 368R (Topic: American Home), Architectural Interior Design 342G. Offered on the letter-grade basis only. Prerequisite: Upperdivision standing; for students in the School of Architecture, Architecture 318L with a grade of at least C.

# ARC 342J. Originality and Tradition in Baroque Rome: Borromini.

Explores the synthetic act of design and notions of originality and tradition in the arts of Baroque Rome by studying Francesco Borromini and his work through the lenses of professional design practice, the arts, contemporary Galilean science, and papal society. Three lecture hours a week for one semester Architecture 342J and 368R (Topic: Profesional Design Practice: Baroque Rome) may not both be counted. Offered on the letter-grade basis only. Prerequisite: Upper-division standing; for students in the School of Architecture, Architecture 318L with a grade of at least C; for others, consent of instructor.

# ARC 342K. Representing Landscape and Architecture, 1500-2015.

Explores the roles of visual representation in design and professional practice from Leonardo da Vinci to the digital age. An overview of the history of techniques, media, and conventions of representation in architecture and landscape architecture and in their intersections. Includes some drawing and painting. Three lecture hours a week for one semester. Architecture 342K and 368R (Topic: Representing Landscape and Architecture, 1500-2015) may not both be counted. Offered on the letter-grade basis only. Prerequisite: Upper-division standing; for students in the School of Architecture, Architecture 318L with a grade of at least C; for others, consent of instructor.

#### ARC 342R. Topics in the History of Architecture.

Seminars and lecture/seminars on advanced topics in the history of architecture. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: For students in the School of Architecture, Architecture 318L with a grade of at least C and upper-division standing; for others, upper-division standing.

**Topic 1: Twentieth-Century Latin American Architecture.** Architecture 342R (Topic 1) and 368R (Topic: 20th-Cen Latin American Arch) may not both be counted.

**Topic 2: American Architecture.** Architecture 342R (Topic 2) and 368R (Topic: American Architecture) may not both be counted.

**Topic 3: Brazilian Urban.** Architecture 342R (Topic 3) and 368R (Topic: Brazilian Urban Theory) may not both be counted.

**Topic 4: Central European Architecture, 1648-Present.** Architecture 342R (Topic 4) and 368R (Topic: Central European Architecture 1648-Present) may not both be counted.

**Topic 5: German Modernism.** Architecture 342R (Topic 5) and 368R (Topic: German Modernism) may not both be counted.

**Topic 6: History of Architecture Since 1985.** Architecture 342R (Topic 6) and 368R (Topic: History of Architecture since 1985) may not both be counted.

**Topic 7: History of Building Technology.** Architecture 342R (Topic 7) and 368R (Topic: History of Building Technology) may not both be counted.

**Topic 8: Hybridity in Landscape/Architecture.** Architecture 342R (Topic 8) and 368R (Topic: Hybridity in Landscape Architecture) may not both be counted.

**Topic 9: Loos and Mies.** Architecture 342R (Topic 9) and 368R (Topic: Loos and Mies) may not both be counted.

**Topic 10: Modern American Design.** Architecture 342R (Topic 10) and 368R (Topic: Modern American Design) may not both be counted.

#### ARC 342S. Modern European Architecture.

Three lecture hours a week for one semester Architecture 342S and 368R (Topic: Modern European Arch-Europe) may not both be counted. Prerequisite: Upper-division standing.

#### ARC 342T. Advanced Architecture History.

Three lecture hours a week for one semester. Architecture 342T and ARC 368R (Topic: Advanced Architecture History-ITA) may not both be counted. Prerequisite: Upper-division standing.

#### ARC 342U. Modern History of Sustainable Architecture.

Three lecture hours a week for one semester Architecture 342U and 368R (Topic: Mod Hist of Sustainbl Arch-Ger) may not both be counted. Prerequisite: Upper-division standing.

#### ARC 350R. Topics in Design Theory.

Advanced topics in architecture and associated disciplines to encourage critical and theoretical thinking. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: For students in the School of Architecture, upper-division standing; for others, upper-division standing and consent of instructor; additional prerequisites may vary with the topic.

**Topic 1: The Modern American City.** Same as Geography 337 and Urban Studies 352 (Topic 1: The Modern American City). Issues facing residents of United States cities, such as transportation and housing, poverty and crime, metropolitan finance, environmental and architectural design; historical/comparative urban evolution. Prerequisite: Upper-division standing.

**Topic 3: Urban Design Practice.** Same as Urban Studies 352 (Topic 3: Urban Design Practice).

**Topic 4: Economy/Value/Quality of Life.** Same as Urban Studies 352 (Topic 4: Economy/Value/Quality of Life).

#### ARC 351R. Visual Communication.

Advanced topics in various methods of visual communication. Three lecture hours or six laboratory hours a week for one semester. May be

repeated for credit when the topics vary. Prerequisite: Architecture 520L with a grade of at least C, or consent of instructor.

Topic 1: Computer Applications in Design. Six studio hours a week for one semester.

Topic 2: Introduction to Computer Applications. Six studio hours a week for one semester.

Topic 4: Composition, Presentation, and Portfolio. Three lecture hours a week for one semester.

**Topic 5: Descriptive Geometry.** Three lecture hours a week for one semester.

Topic 6: Drawing Clinic. Three lecture hours a week for one semester. Topic 7: Introduction to Computer Imaging. Three lecture hours a week for one semester.

Topic 8: Seeing Things: General Drawing. Three lecture hours a week for one semester.

Topic 9: Solid Geometry Drawing. Three lecture hours a week for one semester.

Topic 10: Visual Communication Exercises. Three lecture hours a week for one semester.

#### ARC 560T, 660T. Advanced Design.

For 560T, restricted to students in the School of Architecture; for 660T, restricted to students participating in the School of Architecture's professional residency program. Technical communication studio to develop the student's ability to combine the elements of a thorough building design. For 560T, fifteen laboratory hours a week for one semester; for 660T, eighteen laboratory hours a week for one semester. Only one of the following may be counted Architecture 560T, 660T, 561C. Prerequisite: Upper-division standing; Architecture 520E (or 520L) and 520G (or 530T) with a grade of at least C in each; registration for Architecture 361T; and satisfactory completion of third-year portfolio review.

#### ARC 561C. Comprehensive Studio.

Restricted to students in the School of Architecture. Comprehensive studio to develop the ability to combine the elements of a thorough building design. Fifteen studio hours a week for one semester. Only one of the following may be counted: Architecture 560T, 660T, or 561C. Prerequisite: Architecture 520E (or 520L) and 520G (or 530T) with a grade of at least C in each; registration for Architecture 335M; and satisfactory completion of third-year portfolio review.

#### ARC 561R, 661R. Advanced Design.

Restricted to students in the School of Architecture. Architecture 661R is restricted to students participating in the Professional Residency Program. Advanced problems in architectural design. For Architecture 561R, fifteen studio hours a week for one semester; for 661R, eighteen studio hours a week for one semester. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: Architecture 520E (or 520L) and 520G (or 530T) with a grade of at least C and satisfactory completion of third-year portfolio review.

#### ARC 361T. Technical Communication.

Restricted to students in the School of Architecture. Studio to produce construction documents. Six studio hours a week for one semester. Prerequisite: Architecture 520E (or 520L) and 520G (or 530T) with a grade of at least C in each; and satisfactory completion of third-year portfolio review

#### ARC 362. Professional Practice.

Restricted to students in the School of Architecture. Ethical, legal, and administrative responsibilities of the architect; organizations, processes, and roles in architecture. Three lecture hours a week for one semester.

Prerequisite: One of the following with a grade of at least C: Architecture 561R, 561C, or 560T.

#### ARC 368R. Topics in the History of Architecture.

Seminars and lecture/seminars on advanced topics in the history of architecture. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: For students in the School of Architecture, Architecture 318L with a grade of at least C; for others, consent of instructor.

#### ARC 378R. Bachelor Design Study, Part I.

Restricted to advanced design-level Bachelor of Architecture students. Independent research, planning, and prep course that must be followed by Architecture 578S. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upper-division standing; must have passed Portfolio Review; GPA of at least 3.5; and a Bachelor Design Study (BDS) proposal approved by the Associate Dean for Undergraduate Programs.

#### ARC 578S. Bachelor Design Study, Part II.

Restricted to advanced design-level Bachelor of Architecture students. An independent studio that follows Architecture 378R. Five lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upper-division standing; must have passed Portfolio Review; a GPA of least 3.5; and a grade of at least C in Architecture 378R.

#### ARC 279, 379, 479, 579. Architectural Research.

Investigation of problems selected by the student with the approval of the supervising instructor and the associate dean for undergraduate programs. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. A grade of at least C is required for degree credit. Prerequisite: Consent of instructor.

#### **Community and Regional Planning: CRP**

#### **Lower-Division Courses**

#### **Upper-Division Courses**

#### CRP 369K. Principles of Physical Planning.

Same as Urban Studies 352 (Topic 6). Introductory course in the physical dimension of urban planning. Three lecture hours a week for one semester. Only one of the following may be counted: Community and Regional Planning 369K, Urban Studies 352 (Topic: Principles of Physical Planning), 352 (Topic 6). Prerequisite: Upper-division standing, and one of the following with a grade of at least C: Architecture 561R, 661R, 561C, 560T, 660T.

# Red McCombs School of Business

Jay C. Hartzell, PhD, Dean D. Eric Hirst, PhD, Senior Associate Dean, Academic Affairs David E. Platt, PhD, Associate Dean, Undergraduate Program Arthur T. Allert, BBS, Assistant Dean, Undergraduate Program http://www.mccombs.utexas.edu/bba

# **General Information**

### Mission

The core purpose of the Bachelor of Business (BBA) degree program is to produce well-rounded and ethical graduates who are valued for their mastery of the basic tenets and techniques of their declared major(s), their broad understanding of the greater context in which businesses operate, and their potential to become leaders who create value for society.

### History

In April 1912 the first professor of the new "business training" program was hired and business classes were first offered in the fall of 1912 with a total of nine courses and two faculty. The School of Business Training was originally started as a part of the College of Arts and Sciences and by 1916 the program name had changed to Business Administration. With the continued growth of the program a new Bachelor of Business Administration degree was approved by the Regents in 1916 and the first BBA degrees were awarded to nine graduates in spring 1917. The business program at The University of Texas at Austin became a charter member in 1916 of the American Association of Collegiate Schools of Business, the accrediting agency for business schools, where it has remained fully accredited for both business and accounting. The Masters of Business Administration degree was approved in 1917 and graduate courses were started shortly thereafter. The first woman on the business faculty was hired in 1919 and the first women graduates in business received their degrees in 1920.

With increasing student interest in business education and continued growth of the program the Regents approved a new and separate School of Business Administration in 1922. In 1925 a research division of the school was established with the Bureau of Business Research which published the "Texas Business Review" in spring 1927, the first of its kind in Texas. A Ph.D in Business Administration was approved by the Regents in 1930 and was the first to be offered in the Southwest.

Given the growth of academic offerings and continuing increases in enrollment Waggener Hall was built in 1932 as a dedicated building for the business school. In 1945 the school was reorganized as the College of Business Administration with five academic departments: accounting; finance, real estate and insurance; general business; management; and marketing. In 1962 a new building for the College of Business was created with the Business-Economics Building. In 2000 the College of Business Administration and the Graduate School of Business were renamed the McCombs School of Business in honor of University alumnus and benefactor Red McCombs.

### Facilities

The McCombs School is housed in the George Kozmetsky Center for Business Education. This three-building complex includes modern classrooms and offices, lecture rooms with multimedia equipment, conference and communal study rooms, as well as lounges for informal student and teacher interaction. Computer classrooms, computer laboratories, the Financial Trading and Technology Center, and a behavioral science laboratory are also available. Computer and computer-access facilities are available to students, faculty members, and staff members. The McCombs School of Business has its own computer network that links to the school's laboratories and computing resources. The network is also connected to the University's computing infrastructure.

Students enrolled in a degree program at the McCombs School of Business will be expected to own a portable computing device suitable for use in the classroom and on the University wireless network.

# Financial Assistance Available through the School

Students who are enrolled in the McCombs School of Business are eligible for scholarships and awards funded by industry, foundations, and individuals. Some of these awards are available school-wide, while others are restricted to students in one department. Students selected to receive an award are selected based on their academic performance, leadership and donor specific criteria which may include financial need.

Most scholarships are for continuing students who have declared a business major. Generally, scholarships are awarded annually with some being renewable. Criteria for awarding scholarships vary to meet the wishes of the donors but often include financial need, academic performance, major area of study, and hometown. The deadline for submission is the end of the spring semester for scholarships in the following academic year. Recipients are selected by the BBA Program Office of the school and are usually notified during the summer.

Departmental scholarships are generally reserved for juniors and seniors majoring in a program of the department. Because departmental scholarships are normally funded by annual contributions, the number of scholarships and the amounts awarded vary among departments and over time. Criteria for departmental awards are specified by the donors and include the same kinds of characteristics as those established for school-wide awards; deadlines and other elements of the selection process also vary among departments. Interested students should contact the major department for further information.

### **Student Services**

The BBA Program Office provides administrative support and a wide array of student services for the school. Student services are offered to all enrolled BBA students to enhance their academic experience and professional development, and include academic advising, career services, study abroad, and leadership development.

### Academic Advising

Every McCombs undergraduate student is assigned to a professional academic adviser prior to their first semester enrolled in school. Academic advisers in the BBA Program Office provide individualized, comprehensive advising and serve as a referral resource to students to ensure timely progress toward degree completion. Faculty advisers are also available in each academic department to help students explore their educational and career goals.

All students are encouraged to meet regularly with their assigned advisers. However, those who have been enrolled in the school for at least one semester are permitted to self-advise and register without consulting an academic adviser. To be eligible to self-advise, the student must have a University grade point average of at least 2.00. Like all undergraduate students, those who self-advise are responsible for knowing the requirements of the degree program they have chosen, for enrolling in courses appropriate to that degree program, for meeting the prerequisites of the courses selected, and for taking courses in the proper sequence to ensure timely progress toward the degree. See Student Responsibility (p. 19) in The University section for more information.

### **Career Services**

BBA Career Services offers job search assistance to enrolled business students. The purpose of the office is to help students determine their career goals, develop a plan for achieving these goals, and select and obtain employment commensurate with their goals, interests, and training.

To help students prepare for their career search, BBA Career Services offers BBA students individualized career coaching, specialized programming, and a variety of events and workshops that provide exposure to diverse industries and potential career paths. BBA Career Services offers assistance with conducting a job search, résumé and cover letter writing, interviewing, evaluating offers, and other recruiting topics. The department maintains additional career resources and general business publications in their office.

In addition to the career-related workshops, the BBA Career Coaching team also teaches the required courses Business Administration 101S, 101H, and 101T to freshmen and transfer students. These courses present the foundations for executing a successful job search and focus on career management as a lifelong process, as well as assist business students with **planning**, **implementing** and **evaluating** their careers. After completing these courses, students can implement job search strategies and interviewing techniques in pursuing internship and fulltime employment opportunities.

Most students obtain an internship, which can satisfy the undergraduate business curriculum experiential learning course requirement, at the end of their junior year. However, BBA Career Services encourages freshmen and sophomores to attend its recruiting activities and events, which can help them obtain other internships that may provide valuable experience but don't count for the required experiential learning course. These experiences can help students develop their résumés and job search skills.

About 800 individual interviews for internships and full-time opportunities are arranged annually with employers in business, industry, government, and not-for-profit organizations. Over 200 firms conduct oncampus interviews at the McCombs School of Business each year.

Another resource for employers and students is the online job board, *RecruitMcCombs. RecruitMcCombs* helps recruiters reach current students, and the *McCombs Alumni Job Board* connects employers to McCombs Alumni. These job boards complement the on-campus recruiting program by allowing companies to recruit candidates for a wide variety of roles in their organizations throughout the calendar year.

More information about BBA Career Services is provided on the McCombs School of Business website (http://my.mccombs.utexas.edu/ My/BBA/Career-Services).

As a complement to the assistance available from the school, the Vick Center for Strategic Advising & Career Counseling (http:// www.utexas.edu/ugs/csacc) serves students across campus who are exploring majors and careers. The center helps students learn more about their interests, skills and values; define short and long term goals; identify suitable major and career options; seek an internship; and plan for their job search or for graduate study. The University makes no promise to secure employment for each graduate, but rather provides the tools and resources to ensure that students have access to employment opportunities.

### **Student Organizations**

Student organizations play a vital role in the educational experience offered by the University. Students who become involved in organizations gain experience in leadership, teamwork, networking, time management, and other practical areas. This experience, when combined with the theoretical knowledge gained in the classroom, helps students develop a well-rounded set of skills for use academically, professionally, and personally.

The Undergraduate Business Council (UBC) is the governing student body in the school. It is made up of representatives from McCombs Affiliated Student Organizations, an executive board, representatives elected by the student body, and members appointed by the executive board. The UBC represents all undergraduate business students in university affairs, and sponsors programs such as McCombs Kickoff, Family Weekend, the VIP Distinguished Speaker Series, and the Faculty Honor Roll.

Business student organizations sponsor professional activities such as guest lectures, field trips, and faculty chats; many offer social activities as well. The McCombs Affiliated Student Organizations are:

Student Organizations
AEM
AISEC
Alpha Kappa Psi
American Marketing Association
Apprentice Club
Asian Business Students Association
Association of Latino Professionals for America
Black Business Student Association
Business Healthcare Association
Business Law Association
Capital Community
Consult Your Community
DECA
Delta Sigma Pi
Enactus
Freshman Business Association
GLBTQA+ Business Student Association
Hispanic Business Student Association
Honors Business Association
International Business Students Association
Latin Economics and Business Association
Longhorn Kiva
Management Information Systems Association
McCombs Diversity Council
National Association of Black Accountants
Phi Chi Theta
Student Consulting Initiative
Supply Chain Management Student Organization
Technology & Business
Texas Convergent
Texas Society for Policy & Enterprise
Texas Stock Team

Undergraduate Business Council Undergraduate Real Estate Society University Accounting Association University Finance Association University Investors Association University Management and Business Research Association Universities Securities Investment Team Women in Business Association

### Study Abroad

BBA International Programs offer McCombs School of Business students the opportunity to study abroad in two main ways: on an exchange program (summer, semester or academic year) at one of our many partner schools around the world; and on short-term, faculty-led summer programs, offering pre-determined McCombs courses which are taught abroad in various international locations. Both types of study abroad opportunities enable students to make progress toward their University degree requirements while gaining valuable intercultural experiences. More information is available at https://my.mccombs.utexas.edu/My/ BBA/IP.

### Leadership Development Program

The McCombs Leadership Program (LP) provides students the opportunity to gain valuable skills to complement academic requirements while enhancing leadership development awareness and actions on individual, local, and global levels through unique programs and activities. All business majors who are not in the Business Honors Program and are freshmen, sophomores, or transfer students may apply. The LP requires a four-year commitment from freshmen and a threeyear commitment from sophomores and transfer students. The primary goal of the Leadership Program is to enhance student learning and development as it relates to self-knowledge and leadership competence, and to expand the student's leadership portfolio during his or her time at the McCombs School of Business.

Admission to the Leadership Program is limited to a small number of students who are chosen on a competitive basis each year. More information and an online application form are available at the Leadership Program's website (https://my.mccombs.utexas.edu/My/ BBA/Student-Life/Leadership-Program).

# **Admission and Registration**

### Admission

### **Admission Policies of the School**

Admission and readmission of undergraduate students to the University is the responsibility of the University director of admissions. Information about admission to the University is given in *General Information* (http:// catalog.utexas.edu/general-information/admission/undergraduate-admission).

Each year there are more qualified applicants to the McCombs School than can adequately be instructed by the faculty or accommodated within existing facilities. To provide students with the best educational experience possible, the school must limit undergraduate admission. Therefore, admission to the school is extremely competitive and admission requirements are more stringent than those of the University. As a result, a student may be admitted to the University but denied admission to the school. The student must be admitted to the school to pursue a degree program described in this catalog. Admission to the school is granted for the fall semester only; summer session admission may be possible for freshmen. Students admitted for fall are expected to attend Orientation the summer before they enter the school.

# Freshman Admission Requirements for Texas Residents

To be considered for admission to the school, Texas-resident high school students must be granted regular admission to the University. However, because enrollment is limited by the availability of instructional resources, admission requirements for business degree programs are more restrictive than those of the University. High school rank, SAT Reasoning Test or American College Testing Program (ACT) scores, extracurricular activities, and essays are among the factors used in making admission decisions. A student who is admitted to the University but denied admission to the school may seek admission to another academic program at the University.

### Freshman Admission Requirements for Nonresidents

Because of enrollment restrictions dictated by the availability of faculty and facilities in the school and by the limitations on nonresident enrollment imposed by the Board of Regents, nonresident applicants may find the admission process extremely competitive.

# Application Procedures for Freshman Admission

Students may apply for admission through the Office of Admissions website, http://admissions.utexas.edu/. To be considered for admission to the McCombs School of Business, the student should specify business as his or her intended major. All application materials must be submitted to the Office of Admissions by the deadline to apply for admission to the University for the summer session or fall semester; these dates are given in *General Information* (http://catalog.utexas.edu/ general-information/admission/undergraduate-admission).

### **Admission with Deficiencies**

Students who were admitted to the University with deficiencies in high school units must remove them by the means prescribed in *General Information* (http://catalog.utexas.edu/general-information/admission/ undergraduate-admission/#freshmanadmissiontext). Credit used to remove a deficiency may not be counted toward the degree. It may be earned on the pass/fail basis. Students may not declare a major until high school unit deficiencies have been removed.

### Foreign Language Proficiency

A student who transfers to the university must provide evidence that he or she has fulfilled the foreign language proficiency requirement for the Bachelor of Business Administration degree. Students may not declare a major until the foreign language proficiency requirement has been met.

### Admission-to-Major Requirements for Students Previously Enrolled in the School

A former student who was most recently enrolled in the McCombs School of Business and who is readmitted to the University reenters the major in which he or she was last enrolled. However, a former business student who has earned a Bachelor of Business Administration degree at the University is readmitted with the classification "non-degree seeking student."

A former student who was most recently classified as a prebusiness student will be readmitted to the transitional student classification. The student may then apply for admission to a business major according to the procedures given in the section Internal Transfer.

### Transfer Internal Transfer

Students enrolled in other programs at the University who wish to enter a degree program described in this catalog must submit an application for a change of major to the BBA Program Office by May 15 to be considered for admission in the following fall semester. The following minimum requirements for consideration are in addition to the requirements to transfer from one division to another that are given in *General Information* (http://catalog.utexas.edu/general-information/registration-tuition-and-fees/transfer-from-one-division-to-another-within-the-university).

- 1. Completion of 26 semester hours of coursework in residence on the letter-grade basis by the end of the preceding spring semester; these hours must count towards the BBA degree (p. 55)
- 2. Completion of Mathematics 408K and 408L, Mathematics 408N and 408S, or Mathematics 408C and 408D, or the equivalent
- 3. Completion of Economics 304K and 304L
- 4. Students must meet the admission standards for foreign language proficiency, requiring two years of a single foreign language in high school or one year of a single foreign language in college
- 5. A grade point average of at least 3.25 on University in-residence coursework

Students are strongly encouraged to complete Rhetoric and Writing 306 or its equivalent before starting classes in the McCombs School of Business.

An applicant's disciplinary record, as maintained by the Office of the Dean of Students, will be reviewed for academic dishonesty or other violations of University policy. Violations will be reported to the Admissions Committee and taken into account as part of the application process. Violations may exclude a student from admission depending on the nature and severity of the offense(s).

Admission is granted on a space-available basis and may not be possible if instructional resources are not compatible with enrollment demands. A student with a grade point average of less than 3.40 is unlikely to be admitted to the school.

### **External Transfer**

A student seeking to transfer to the McCombs School of Business from another university should list business as his or her intended major on the admission application. Because students are not admitted to the school for the spring, application materials must be submitted to the Office of Admissions by the appropriate deadline for the student to be considered for admission in the following fall semester. The following minimum requirements for consideration are in addition to the requirements for transfer admission that are given in *General Information* (http://catalog.utexas.edu/general-information/admission/ undergraduate-admission/#transferadmissiontext).

- 1. Completion of Mathematics 408K and 408L, Mathematics 408N and 408S, Mathematics 408C and 408D, or Mathematics 403K and 403L, or the equivalent
- 2. Completion of Economics 304K and 304L
- 3. Students must meet the admission standards for foreign language proficiency, requiring two years of a single foreign language in high school or one year of a single foreign language in college
- 4. A grade point average of at least 3.00 on transferable college credit

Students are strongly encouraged to complete Rhetoric and Writing 306 or its equivalent before starting classes in the McCombs School of Business.

Because of enrollment restrictions dictated by the availability of faculty and facilities in the school and by the limitations on nonresident enrollment imposed by the Board of Regents, an applicant may be denied admission to the McCombs School even though he or she meets University transfer requirements. Such an applicant may seek admission to another academic program at the University. A student with a grade point average of less than 3.50 is unlikely to be admitted to the McCombs School.

### **Declaring a Major**

Each student is admitted to the McCombs School with an unspecified major. The student may declare a specific business major when he or she has completed thirty semester hours of coursework, including Business Administration 101H, 101S, or 101T, Economics 304K and 304L, Mathematics 408C, 408K, or 408N, and Mathematics 408D, 408L, or 408S; has registered with BBA Career Services; and has fulfilled the foreign language proficiency requirement for the Bachelor of Business Administration degree. All students are required to declare a major before completing 75 semester hours. Students may declare their majors online at https://utdirect.utexas.edu/business/bba/. A student seeking admission to the integrated MPA or the Business Honors Program must complete a separate application; requirements for admission to these programs are given in the Accounting (p. 58) and Business Honors Program (p. 59) sections, respectively.

### Registration

General Information (http://catalog.utexas.edu/general-information/ registration-tuition-and-fees) gives information about registration, adding and dropping courses, transfer from one division of the University to another, and auditing a course. The *Course Schedule* (http:// www.registrar.utexas.edu/schedules), published before registration each semester and summer session, includes registration instructions, advising locations, and the times, places, and instructors of classes. The *Course Schedule* and *General Information* are published on the registrar's website, http://registrar.utexas.edu/. Registration information specific to BBA students can be found at https://my.mccombs.utexas.edu/My/ BBA/Registration.

# Academic Policies and Procedures

### **Repetition of a Course**

A student pursuing a Bachelors of Business Administration (BBA) may not enroll in any course in the McCombs School of Business more than twice, even if the course is needed to meet degree requirements, without first obtaining consent of his or her academic adviser in the BBA Program Office. Enrolling in a course more than three times requires approval from the dean. The symbol *Q* or *W* counts as an enrollment.

To request to enroll in a course for a third time or beyond a student must submit an online petition. Supporting documentation may be required.

The official grade in a course is the last one made; however, if a student repeats a course and has two or more grades, all grades and all semester hours are used to calculate the University grade point average and to determine the student's scholastic eligibility to remain in the University and his or her academic standing in the McCombs School of Business.

A student may not repeat for credit or grade points any course in which he or she has earned a grade of *C*- or higher (or the symbol *CR*, if the course was taken on the pass/fail basis).

# Applicability of Certain Courses

### **Physical Activity Courses**

Physical activity (PED) courses are offered by the Department of Kinesiology and Health Education. They may not be counted toward the Bachelor of Business Administration degree. However, they are counted among courses for which the student is enrolled, and the grades are included in the grade point average.

### **ROTC Courses**

No more than 12 semester hours of air force science, military science, or naval science coursework may be counted toward the Bachelor of Business Administration degree. ROTC courses may be used only as nonbusiness or free electives and may be counted toward the degree only by students who complete the third and fourth years of the ROTC program and accept a commission in the service.

### **Courses Taken on the Pass/Fail Basis**

A business student may count toward the degree up to four onesemester courses in elective subjects outside the major taken on the pass/fail basis; only free electives (any level/subject), nonbusiness electives, and upper-division nonbusiness electives may be taken on the pass/fail basis. Business courses taken on the pass/fail basis cannot be counted toward the major, unless they are offered only on the pass/ fail basis. Credit earned by examination is not counted toward the total number of courses that the student may take pass/fail.

Complete rules on registration on the pass/fail basis are given in *General Information* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/evaluation/#symbolstext).

# University Extension Self-Paced and Semester-Based Courses

Students planning to take self-paced or semester-based University Extension courses should consult with the BBA Program Office before doing so to ensure compliance with the following restrictions:

- Credit that an in-residence University student earns simultaneously through University Extension or similar means from another institution should be discussed in advance with the student's academic adviser to determine business degree applicability.
- 2. A student may not be enrolled concurrently for courses from University Extension or another institution during his or her last semester without jeopardizing graduation eligibility.
- 3. With regard to registration on the pass/fail basis, extension courses are subject to the same restrictions as courses taken in residence; these restrictions are given in the section Courses Taken on the Pass/Fail Basis.

### **Concurrent Enrollment**

To ensure degree applicability, students are urged to consult with their academic adviser before registering concurrently at another institution, either for resident coursework or for a distance education course, and before enrolling in University Extension self-paced or semester-based coursework. A student may not be enrolled concurrently during his or her last semester in any course to be counted toward the degree without jeopardizing graduation eligibility.

### Honors

### **University Honors**

The designation University Honors, awarded at the end of each longsession semester, gives official recognition and commendation to students whose grades for the semester indicate distinguished academic accomplishment. Both the quality and the quantity of work done are considered. Criteria for University Honors are given in *General Information* (http://catalog.utexas.edu/general-information/academicpolicies-and-procedures/honors/#universityhonorstext).

### **Graduation with University Honors**

Students who, upon graduation, have demonstrated outstanding academic achievement are eligible to graduate with University Honors. Criteria for graduation with University Honors are given in *General Information* (http://catalog.utexas.edu/generalinformation/academic-policies-and-procedures/honors/ #graduationwithuniversityhonorstext). Historical honors information for the McCombs School of Business BBA Program can be found on the college website.

### School Honors Program

The Business Honors Program is available to outstanding students who have distinguished themselves inside the classroom and out by superior performance during high school or in their first year at the University. The program is described in Business Honors Program (p. 59).

# Graduation

### **Special Requirements of the School**

All students must fulfill the minimum General Requirements (p. 20) for graduation given in The University section. Business students must also fulfill the following requirements:

- 1. All students must have a University grade point average of at least 2.00 to graduate. Business students must also have a grade point average of at least 2.00 in business courses counted toward the BBA degree.
  - a. Students in the Business Honors Program who wish to continue in the program or graduate with the Business Honors major must have a University grade point average of at least 3.25 and a grade point average in business courses of at least 3.25.
- 2. The University requires that at least six semester hours of advanced coursework in the major field of study be completed in residence. The McCombs School of Business requires that at least 12 semester hours of upper-division coursework in the major must be completed in residence at the University on the letter-grade basis.
- 3. A candidate for a degree must be registered in the McCombs School of Business either in residence or in absentia the semester or summer session the degree is to be awarded. Students must apply for the degree no later than the date specified in the official academic calendar. An **exception** is that eligible students in the integrated BBA/ MPA program will **automatically** be granted their BBA accounting degrees at the end of four years unless they opt out. Integrated BBA/MPA students are expected to complete their BBA accounting degrees within four years as a milestone toward their MPA degrees. Integrated BBA/MPA students who are not automatically granted their BBA accounting degrees at the end of four years must apply when they are eligible for the degree no later than the date specified in the official academic calendar.

### **Degree Audit**

All McCombs students are advised to monitor their degree progress through regular use of the online Interactive Degree Audit. IDA provides the student with a report of his or her progress toward completion of requirements for a specific degree program. In addition to using IDA, students are encouraged to meet regularly with their academic adviser in the BBA Program Office. The degree audit is not a substitute for individual advising.

### **Applying for Graduation**

A degree candidate must apply for the degree no later than the date given in the official academic calendar, except for the integrated BBA/ MPA program as noted above under Special Requirements of the School. No degree will be conferred unless the diploma application form has been properly filed. Further information, resources, and a link to the graduation application are available at https://my.mccombs.utexas.edu/ My/BBA/Graduation. Freshmen are expected to complete their degree within four years, and transfer students are expected to complete their degree in a timely manner.

# **Degrees and Programs**

Degree requirements are listed below under BBA Degree Requirements and under individual major degree requirements (http:// catalog.utexas.edu/undergraduate/business/degrees-and-programs/ bachelor-of-business-administration). For a complete list of requirements for a degree, the student should combine the degree requirements in these two sections with the University's minimum General Requirements (p. 20) for graduation.

### **Core Curriculum**

All students must complete the University's Core Curriculum (http:// catalog.utexas.edu/general-information/academic-policies-andprocedures/core-curriculum) and the following specific requirements for the BBA, including the requirements of a major. In some cases, a course that is required for the BBA or for a major may also be counted toward the Core Curriculum; these courses are identified below.

### Flags

Each student must complete the University's Core Curriculum (http:// catalog.utexas.edu/general-information/academic-policies-andprocedures/core-curriculum). In the process of completing Core Curriculum and BBA degree requirements, students must earn credit for seven flags as listed below; most of the required flags are attached to the business core and major courses students must complete to earn a BBA degree. Courses may simultaneously satisfy flag and other degree requirements. As applicable, students are advised to fulfill the cultural diversity and the global cultures flag requirements through courses that meet other requirements of the Core Curriculum such as the first-year signature course, American history, government, or visual and performing arts requirements, or BBA degree requirements such as the human behavior requirement or electives. *Please note, students may not earn the cultural diversity and global cultures flag from the same course.* 

Two writing flags: one flag requirement is typically satisfied by Business Administration 324 or 324H, a second by the capstone class in the major when taken in residence.

One quantitative reasoning flag: flag requirement typically satisfied by Accounting 311 or 311H, Accounting 312 or 312H, Statistics 309 or 309H, or 371G when taken in residence. One global cultures flag: BBA students should find a course that satisfies one of the University Core requirements, human behavior requirement, or an elective, which carries the global cultures flag.

One cultural diversity in the United States flag: BBA students should find a course that satisfies one of the University Core requirements, human behavior requirement, or an elective, which carries the cultural diversity in the United States flag.

One ethics flag: typically satisfied by Management 336 or 336H, or Legal Environment of Business 323 or 323H when taken in residence.

One independent inquiry flag: typically satisfied by the capstone class or a class required for the degree; Finance 370, International Business 350, Management 374, 374H, Management Information Systems 375, and Operations Management 337 (Topic 3: *Procurement and Supplier Management*), when taken in residence.

Flags may be added to courses periodically; courses with flags are identified in the *Course Schedule* (http://registrar.utexas.edu/schedules). More information is available in the section on Skills and Experience Flags (http://catalog.utexas.edu/undergraduate/undergraduate-studies/ academic-policies-and-procedures/#skillsandexperienceflags).

### **BBA Degree Requirements**

- A grade point average of at least 2.00 is required on all work undertaken at the University for which a grade or symbol other than *Q*, *W*, *X*, or *CR* is recorded. In addition, a grade point average of at least 2.00 in business courses is required. For more information about grade requirements and restrictions on repetition of courses, please see Academic Policies and Procedures (p. 54).
- 2. A candidate for the BBA degree must be enrolled in the McCombs School in the semester or summer session in which the degree is awarded.
- 3. Each student is expected to complete the courses required for his or her major and to meet the curriculum requirements described in items 4 through 7 below in the year specified.
- 4. During their freshman and sophomore years, students must complete the University's Core Curriculum (p. 23) requirements.
- 5. Students must complete the following BBA degree requirements during the freshman year:
  - a. Mathematics 408K (may fulfill the quantitative reasoning flag) and 408L; or 408C (may fulfill the quantitative reasoning flag) and 408D; or 408N (may fulfill the quantitative reasoning flag), and 408S; or the equivalent. This coursework may also be used to fulfill the mathematics requirement of the Core Curriculum.
  - b. Economics 304K and 304L. Economics 304K may also be used to fulfill the social and behavioral sciences requirement of the Core Curriculum.
  - c. Management Information Systems 301, a business core course.
  - d. Three semester hours of coursework in anthropology, psychology, or sociology, chosen from approved courses; courses dealing primarily with statistics or data processing may not be used to fulfill this requirement. Educational Psychology 304 is also accepted.
  - e. Business Administration 101H, 101S, or 101T. Entering freshmen take Business Administration 101S, entering transfer students take Business Administration 101T, and entering business honors students take Business Administration 101H. Because

each course is offered only once a year, failure to take the course in the proper semester will prevent the student from declaring a major and progressing toward the degree.

- 6. Students must complete the following business core courses during the sophomore year.
  - a. Accounting 311 and 312 (both courses may fulfill the quantitative reasoning flag)
  - b. Statistics 309 (may fulfill the quantitative reasoning flag)
  - c. Business Administration 324 (may fulfill the writing flag)
- 7. Eighteen semester hours beyond the first two years are specified as follows:
  - a. Business core courses:
    - i. Legal Environment of Business 323 (may fulfill the ethics flag)
    - ii. Finance 357
    - iii. Marketing 337
    - iv. Management 336 (may fulfill the ethics flag), or Operations Management 335 or 334M.
    - v. Statistics 371G (may fulfill the quantitative reasoning flag); finance majors pursuing the quantitative finance track take Statistics 375 to fulfill this requirement.
  - b. A professional, business-related experiential learning course chosen from the following: Accounting 366P, Business Administration 353, Finance 366P, Management 347P, 366P, 367P, 369P, Management Information Systems 366P, Marketing 366P, Operations Management 366P; only one Business Administration 353 course may be counted toward the degree.
- 8. The following requirements apply in addition to those in items 4 through 7 above:
  - a. Additional coursework to earn a total of at least six semester hours at the upper-division level outside the McCombs School of Business. Students should consult the requirements of their major department for information about additional coursework to be taken outside the school.
  - b. Completion of the requirements of one of the BBA majors listed in the Undergraduate Catalog. At least 24 semester hours in business must be completed in residence on the letter-grade basis at the University, of which at least 12 semester hours must be in upper-division coursework in the student's major. For additional in residence requirements, see the University's minimum General Requirements (p. 20) for graduation given in The University section. Please also see footnote below.

Proficiency in a foreign language equivalent to one year competency is required. This requirement may be fulfilled either by completion of the two high school units in a single foreign language that are required for admission to the University as a freshman or by the demonstration of proficiency at the second-semester level. Credit earned at the college level to achieve the proficiency may be taken on the pass/fail basis, and the credit may count towards the degree. Due to the variety in the way language classes are taught at the University, students should consult their academic adviser. The following are the courses that may be counted towards the residence requirement for each major.

Accounting (BBA)	ACC 326, ACC 327, ACC 329, ACC 362, and ACC 364.
Accounting (Integrated BBA/MPA)	ACC 151, ACC 152, ACC 355, ACC 356, ACC 358C, and ACC 359.
Business Honors Program	B A 324H, FIN 357H, LEB 323H, MAN 336H, MAN 327H, MAN 374H, MKT 337H, O M 335H, and STA 371H or STA 375H.
Finance	ACC 326, FIN 357, FIN 367, FIN 370, and the 12 additional semester hours required for the student's track.
International Business	I B 350 or I B 350S, I B 378, six additional semester hours in requirement 4 of the major (I B electives), and nine additional semester hours in requirement 6 of the major (area studies).
Management (General Management Track)	MAN 336, MAN 374, O M 335 or O M 334M, and 12 additional semester hours required for the general management track in requirement 5 of the major.
Management (Consulting and Change Management Track)	MAN 328, MAN 336, MAN 374, O M 335 or O M 334M, and nine additional semester hours required for the consulting & change management track in requirement 6 of the major.
Management (Entrepreneurship Track)	MAN 336, MAN 327, MAN 327E, MAN 374, O M 335 or O M 334M, and six additional semester hours required for the entrepreneurship track in requirements 7 and 8 of the major.
Management Information Systems	MIS 304, MIS 325, MIS 333K, MIS 374, MIS 375, and six additional semester hours in requirement 3 of the major.
Marketing	I B 350, MKT 337, MKT 460, MKT 370, and nine additional semester hours in requirement 3 of the major.
Science and Technology Management	O M 335 or O M 334M, O M 337 (Topic 5: Project Management), MAN 374 or MIS 375, and nine additional semester hours required for the student's business block.
Supply Chain Management	MAN 336, O M 335 or O M 334M, O M 337 (Topic 3: Procurement and Supplier Management), O M 338, O M 367, O M 368, and six additional semester hours in requirement 5 of the major.

### Bachelor of Business Administration

# Accounting

Two programs are available to students who wish to study accounting at the University. The first is the four-year major in accounting leading to the Bachelor of Business Administration degree. The second is the five-year integrated approach to the Master in Professional Accounting degree, which leads to the award of both the BBA and the Master in Professional Accounting degrees. The objective of the BBA accounting curriculum is to provide students with a broad overall education, solid grounding in the common body of knowledge of business administration, and exposure to accounting in sufficient depth to help them achieve entry-level competence for pursuit of a career in industry. The integrated approach is designed for students who wish to concentrate in accounting and obtain education in an accounting specialization.

### **Bachelor of Business Administration**

The requirements of this program are:

- 1. The Core Curriculum (p. 23) requirements and the BBA Degree Requirements (p. 56)
- 2. Accounting 326, 327 (may fulfill the quantitative reasoning flag), 329, 362, and 364
- 3. Economics 420K or 421K
- 4. Operations Management 335 or 334M
- 5. Management 336 (may fulfill the ethics flag) and 374 (may fulfill the writing and independent inquiry flags)
- 6. Additional elective coursework, if necessary, to provide a total of at least 120 semester hours

### **BBA/MPA: Integrated Approach**

The integrated approach to the Master in Professional Accounting is a five-year program of undergraduate and graduate coursework that allows the student to earn the BBA and the Master in Professional Accounting (MPA) degrees. The professional curriculum, which usually begins in the student's junior year, includes specially designed accounting courses taught in relatively small classes by full-time faculty members.

The accounting faculty has designed three concentrations within this program: auditing/financial reporting, managerial accounting/control, and taxation. Each concentration is a sequence of courses that offers strong preparation for a particular career path. In addition, the student may choose a generalist curriculum.

Because MPA graduates are expected to become leaders in the accounting profession, highly motivated students with the personal qualities and intellectual capacity to establish successful careers in public accounting, industry, not-for-profit organizations, and higher education are encouraged to apply.

### Admission

Students are admitted to the integrated approach according to the following requirements. Admission is granted only for the fall semester. Application materials and information about deadlines are available at www.mccombs.utexas.edu/MPA/iMPA/Admissions. Students interested in this program must have met the following requirements by the application deadline: the foreign language proficiency requirement for the BBA degree; and completion of at least 60 semester hours of coursework, including

- Accounting 311 and 312;
- Business Administration 101H, 101S, or 101T;
- Economics 304K and 304L with a grade of C- or better;

- Mathematics 408C, 408K, or 408N with a grade of C- or better; and
- Mathematics 408D, 408L, or 408S with a grade of C- or better.

The MPA Program Office highly recommends that students complete Economics 420K, *Microeconomic Theory* or 421K, *Microeconomic Theory for Business* before entering the MPA program. If students are unable to take this course prior to admission into the MPA program, this course must be completed by the end of the spring semester of the first year in the program.

It is highly recommended that students complete Finance 357, *Business Finance* prior to admissions into the MPA program, but it must be completed before taking Accounting 380K (Topic 1: *Financial Accounting Standards and Analysis I*) (usually done by the fall semester of the second year in the MPA program).

As stated in the BBA Degree Requirements, "A student may not repeat for credit or grade points any course in which he or she has earned a grade of *C*- or higher."

International students pursuing the BBA/MPA degree: English skills are essential for success in the MPA program. As a result, it is important to demonstrate the ability to speak, read, write, and understand English through the TOEFL or IELTS. Official scores for either the internet-based TOEFL or IELTS must be on the student's record prior to the application deadline, even if s/he was allowed to waive the TOEFL or IELTS for admission to the University. Only applicants from English-speaking countries are allowed to waive this requirement. Please visit the GIAC website (http://www.utexas.edu/ogs/admissions/test\_scores.html) for a list of countries which qualify for the waiver. The preferred minimum for the TOEFL is 105 overall, with a minimum of 24 for each individual section or a minimum band score of 7.5 for the IELTS. If previouslysubmitted test scores do not accurately reflect the applicant's current English proficiency, it is strongly recommended to retake the test to increase scores.

Admission is based on the applicant's University grade point average and SAT Reasoning Test or ACT scores, as well as other relevant examples of academic ability and leadership. An applicant with a University grade point average of less than 3.00 is unlikely to be admitted to this program. Admission may be restricted by the availability of instructional resources. An applicant's disciplinary record, as maintained by the Office of the Dean of Students, will be reviewed for academic dishonesty or other violations of University policy. Violations will be reported to the Admissions Committee and taken into account as part of the application process. Violations may exclude a student from admission depending on the nature and severity of the offense(s).

Before beginning the fifth year, integrated approach students must be admitted to the MPA program. Students must complete at least two long-session semesters in residence in the MPA program. Application forms must be submitted by February 1 of the student's fourth year. Students must have completed the following BBA degree requirements before the application deadline: the University Core Curriculum (https:// www.utexas.edu/ugs/core/requirements), courses needed to declare a major, the human behavior requirement, the lower-division business core, and Business Administration 324.

### **Satisfactory Progress**

Students are expected to make continuous progress toward the degree by completing required accounting coursework each semester. Students who fail to take required accounting coursework two long-session semesters in a row will be removed from the program and placed in the unspecified business major. Students will be notified before this action is taken; they must meet with their academic adviser upon being notified.

### **Experiential Learning**

Integrated MPA students are able to satisfy the BBA degree experiential learning requirement by completing either an undergraduate or a graduate internship or practicum course. A graduate internship or practicum course will simultaneously satisfy a graduate elective for the MPA degree.

### Probation

A student is placed on probation if his or her grade point average in core undergraduate accounting courses falls below 3.00. Except with the consent of the MPA Program Office, a student on probation may not take graduate accounting courses.

### Dismissal

The student is dismissed from the integrated approach if he or she will not achieve a grade point average of at least 2.8 in the core undergraduate accounting courses. Exceptions are granted only by the Master in Professional Accounting Program Committee.

### Graduation

Students pursuing the integrated approach to the MPA degree are expected to complete their BBA accounting degrees within four years as a milestone towards their MPA degree. Students who are eligible will **automatically** be granted their BBA accounting degrees at the end of four years unless they opt out. Integrated BBA/MPA students who are not automatically granted their BBA accounting degrees at the end of four years must apply when they are eligible for the degree, by the date specified in the official academic calendar. The additional requirements for graduation pertaining to the BBA degree are given in Graduation (p. 55). To receive an MPA degree, a student must have a grade point average of at least 3.00 in all coursework taken as part of the minimum 35 hour MPA degree. He or she must also have a grade point average in graduate accounting coursework of at least 3.00.

### **Degree Requirements**

The requirements for the BBA/MPA program are:

- 1. Undergraduate coursework
  - a. The Core Curriculum (https://www.utexas.edu/ugs/core/ requirements) requirements and the BBA Degree Requirements (http://catalog.utexas.edu/undergraduate/business/degreesand-programs/#bbadegreerequirements). Because the integrated approach includes a graduate-level internship course, students may forgo the undergraduate experiential learning course described in requirement 7.b of the BBA Degree Requirements
  - b. Economics 420K or 421K
  - c. Operations Management 335 or 334M
  - d. Management 336 (may fulfill the ethics flag) and 374 (may fulfill the writing and independent inquiry flags)
  - e. Accounting 151, 152, 355, 356, 358C, and 359
  - f. For students in the auditing/financial reporting, managerial accounting/control, or generalist concentration, Finance 367 and a business elective; for students in the taxation concentration, Finance 367 and three semester hours of coursework in legal environment of business or business, government, and society approved by the student's academic adviser
  - g. Additional elective work, if necessary, to provide a total of at least 120 semester hours of undergraduate coursework.
- 2. Graduate coursework

- a. Accounting 380K (Topic 1: Financial Accounting Standards and Analysis I) and 380K (Topic 13: Information Technology for Accounting and Control)
- b. 29 additional semester hours of graduate coursework, including at least 12 hours in accounting and no more than six hours outside business. The student's academic adviser must approve coursework in the student's concentration in advance.

More information is available at http://my.mccombs.utexas.edu/MPA.

# Accounting Suggested Arrangement of Courses

First Year		
First Term	Hours Second Term	Hours
M 408K, 408C, or 408N	4 M 408L, 408D, or 408S	4
RHE 306	3 MIS 301	3
Approved PSY/SOC/ANT/EDP	3 Visual and performing arts	3
UGS 302 or 303	3 B A 101S	1
ECO 304K	3 ECO 304L	3
	16	14
Second Year		
First Term	Hours Second Term	Hours
B A 324	3 ACC 312	3
STA 309	3 STA 371G	3
ACC 311	3 ECO 421K	4
Science and technology part I	3 GOV 312L	3
GOV 310L	3 Science and technology part I	3
	15	16
Third Year		
First Term	Hours Second Term	Hours
ACC 326	3 ACC 327	3
MAN 336	3 Free elective	3
FIN 357	3 E 316L, 316M, 316N, or 316P	3
American history	3 American history	3
Science and technology part II	3 LEB 323	3
	15	15
Fourth Year		
First Term	Hours Second Term	Hours
B A 353	3 MAN 374	3
ACC 329 (fall only)	3 ACC 364 (spring only)	3
ACC 362	3 Free elective	3
MKT 337	3 Upper-division nonbusiness elective	3
O M 335	3 Free elective	2
	15	14

Total credit hours: 120

Note: Schedule to be adjusted depending on student's plans, incoming credits, and course availability

Note: Students should check their Interactive Degree Audit and with their academic adviser about number and type of electives required

# **Business Honors Program**

The Business Honors Program is designed to provide an intellectual challenge for students who have distinguished themselves academically and in leadership roles outside the classroom. The student may choose a general program of study or choose to combine the general program of study with an additional major. Business Honors Program students take 14 business courses in special sections open only to them. Additional information is available from the Business Honors Program Office.

### Admission

Admission to the Business Honors Program is limited to a small number of exceptional students who are chosen on a competitive basis. Admission decisions are made by the Business Honors Program Committee. Most students enter the program as freshmen, but some are admitted as sophomores.

Students entering the University and the McCombs School of Business as freshmen may apply to the Business Honors Program by completing a separate online application available through The University of Texas at Austin Office of Admissions. The Business Honors Program Committee considers the student's SAT Reasoning Test or ACT scores, high school class rank, preparatory courses, extracurricular activities, evidence of leadership ability, and other objective criteria.

Students may also seek admission to the Business Honors Program during the spring semester of their freshman year to begin taking courses as a sophomore. To be considered for admission, the student must have completed in the fall and spring semesters of the freshman year at least 26 semester hours of college-level coursework; this coursework must include Economics 304K and 304L or equivalent, Mathematics 408C (may fulfill the quantitative reasoning flag) or 408K (may fulfill the quantitative reasoning flag), and Mathematics 408D or 408L or equivalent. The Business Honors Program Committee considers the student's grade point average in courses taken in residence at the University and the number, type, and rigor of the courses the student has taken at the University. Students will also be evaluated based upon evidence of their extracurricular activities and leadership abilities. An applicant's disciplinary record, as maintained by the Office of the Dean of Students, will be reviewed for academic dishonesty or other violations of University policy. Violations will be reported to the Admissions Committee and taken into account as part of the application process. Violations may exclude a student from admission depending on the nature and severity of the offense(s).

Students applying to the Business Honors Program are permitted to have received credit for Business Administration 101S and/or Management Information Systems 301; however, no credit will be accepted for other courses normally taken as part of the honors core.

Application materials and information about deadlines are available at http://www.mccombs.utexas.edu/programs/bhp/.

### Continuance

A student who enters the Business Honors Program as a freshman must have a grade point average of at least 3.50 on the courses taken in residence during the fall and spring semesters of the first year to continue in the program. The student must complete at least 12 semester hours in residence on the letter-grade basis during each of those two semesters. After the freshman year, each student, whether admitted as a freshman or as a sophomore, is dismissed from the program if his or her overall or business grade point average drops below 3.25. Exceptions are granted only by the Business Honors Program Committee.

### Graduation

To graduate under the Business Honors Program, the student must earn a University grade point average of at least 3.25 and a grade point average of at least 3.25 in business courses.

### **Degree Requirements**

Business Honors Program students may choose a general program of study, or choose to combine the general program of study with an additional major. Requirements for the general program of study are:

- 1. The Core Curriculum (p. 23) requirements and the BBA Degree Requirements (p. 56)
- 2. Completion of the following business core courses and other business courses in special Honors Program sections:

Accounting 311H (may fulfill the quantitative reasoning flag) Accounting 312H (may fulfill the guantitative reasoning flag) **Business Administration 101H** Business Administration 324H (may fulfill the writing flag) **Business Administration 151H** Finance 357H Legal Environment of Business 323H (may fulfill the ethics flag) Management 336H (may fulfill the ethics flag) Management 327H Management 374H (may fulfill the writing and independent inquiry flags) Management Information Systems 301H Marketing 337H **Operations Management 335H** Statistics 371H (may fulfill the quantitative reasoning flag) or 375H; to be taken after completion of Statistics 309

- 3. Six semester hours of upper-division business electives
- 4. Additional elective coursework, if necessary, to provide a total of at least 120 semester hours

### Business Honors Program Suggested Arrangement of Courses

Eiret Voor

First Year		
First Term	Hours Second Term	Hours
B A 101H <sup>1</sup>	1 M 408L, 408D, or 408S	4
RHE 306	3 ECO 304L	3
Approved PSY/SOC/ANT/EDP	3 B A 324H	3
UGS 302 or 303	3 MIS 301H <sup>1</sup>	3
M 408K, 408C, or 408N	4 Visual and performing arts	3
ECO 304K	3	
	17	16
Second Year		
First Term	Hours Second Term	Hours
ACC 311H <sup>1</sup>	3 ACC 312H <sup>1</sup>	3
GOV 310L	3 STA 371H or 375H <sup>1</sup>	3
B A 151H <sup>1</sup>	1 GOV 312L	3
MAN 327H <sup>1</sup>	3 Nonbusiness elective	3
STA 309	3 Science and technology part I	3
	13	15
Third Year		
First Term	Hours Second Term	Hours
MAN 336H	3 O M 335H	3
Free elective	3 Free elective	3
American history	3 FIN 357H	3
Science and technology part I	3 E 316L, 316M, 316N, or 316P	3
MKT 337H	3 Science and technology part II	3
	15	15
Fourth Year		
First Term	Hours Second Term	Hours
B A 353	3 MAN 374H	3
LEB 323H	3 Free elective	3

American history	3 Upper-division business elective	3
Upper-division nonbusiness elective	3 Free elective	2
Upper-division business elective	3 Upper-division nonbusiness elective	3
	15	14

Total credit hours: 120

<sup>1</sup> This course must be taken within the year and semester it is listed under.

Note: Schedule to be adjusted depending on major selection, incoming credits, and course availability

Note: Students should check their Interactive Degree Audit and with their academic adviser about number and type of electives required

## Finance

Finance is the study of resource allocation—the process, markets, institutions, and instruments that provide for the transfer of money and wealth. The finance degree program offers students an opportunity to study the finance function in the business firm, the financial services firm, and the financial system.

The finance major presents students with the theoretical framework and analytical tools and techniques to handle a variety of finance and business functions. Students may choose one of seven tracks: corporate finance and investment banking, energy finance, investment management and banking, quantitative finance, finance with required accounting minor, or real estate; students who do not wish to specialize may choose the general finance track.

Corporate finance and investment banking courses are designed to prepare students for careers as associates of corporate treasury departments, as corporate financial analysts, and as management consultants. Energy finance courses are designed to prepare students for positions in project financing, valuation, and risk management in the energy sector. Investment management and banking courses are designed to give students a background suitable for starting positions as financial analysts with investment funds, investment banks, commercial banks, and other financial institutions. Quantitative finance courses are designed to prepare students for financial analyst positions in research departments of financial institutions and for graduate study in finance. Real estate courses are designed to give students a broad background in valuing and managing real estate; the track is intended to prepare students for positions in real estate commercial brokerage and appraisal, mortgage banking, loan underwriting, real estate development and investment, and property management. The finance track with a required accounting minor is appropriate for students who wish to enhance their understanding of auditing/financial reporting, managerial accounting/ control and taxation, and students whose careers will interact with the Controller function of their organization.

Finance majors may specialize further by completing the Financial Analyst Program (FAP). This one year program allows competitively selected business students to work closely with finance faculty members and industry professionals to develop their skills and experience as analysts. The program may be combined with any of the finance options. More information about FAP is available in the Department of Finance office and at their website (http://www.mccombs.utexas.edu/Centers/ AIM/Financial-Analyst-Program.aspx).

The requirements of this program are:

1. The Core Curriculum (p. 23) and the BBA Degree Requirements (p. 56)

- 2. Accounting 326 (with the exception of the finance track with required accounting minor), Finance 367, and 370 (may fulfill writing and independent inquiry flags)
- Only one independent study may be counted toward the finance major with the exception of the general finance track, the finance track with required accounting minor, and the real estate track, which do not allow independent study, as noted below
- 4. One of the following tracks:
  - a. Corporate Finance and Investment Banking i. Finance 374C
    - ii. One of the following courses: Accounting 327 (may fulfill the quantitative reasoning flag), 329, 362, or 364
    - iii. Two of the following courses: Finance 366P, 371M, 372, 373, 374S, 376, 377 (Topic 1: Portfolio Analysis and Management), either 377 (Topic 2: Financial Risk Management) or 377 (Topic 5: Energy Financial Risk Management), and either 377 (Topic 3: Security Analysis) or 377 (Topic 4: Financial Analysis)
  - b. Energy Finance
    - i. Finance 374C
    - ii. Finance 377 (Topic 5: Energy Financial Risk Management)
    - Two of the following courses: Finance 366P, 371M, 372, 373, 374S, 375F, 376, 377 (Topic 1: Portfolio Analysis and Management), and either 377 (Topic 3: Security Analysis) or 377 (Topic 4: Financial Analysis)
  - c. Investment Management and Banking
    - i. Finance 377 (Topic 1: Portfolio Analysis and Management)
    - ii. Finance 371M
    - iii. Two of the following courses: Finance 366P, 372, 373, 374C, 374S, 375F, 376, either 377 (Topic 2: Financial Risk Management) or 377 (Topic 5: Energy Financial Risk Management), either 377 (Topic 3: Security Analysis) or 377 (Topic 4: Financial Analysis), and Real Estate 378K
  - d. General Finance
    - i. Twelve semester hours of upper-division coursework in finance; up to six hours may be taken in real estate. The following courses may **not** be used to fulfill this requirement: Finance 357, 367, and 370. Finance 377 (Topic 2: *Financial Risk Management*) and 377 (Topic 5: *Energy Financial Risk Management*) may not both be used. Finance 377 (Topic 3: *Security Analysis*) and 377 (Topic 4: *Financial Analysis*) may not both be used; Topic 3 is open only to students in the Financial Analyst Program.
    - ii. An independent research course may not be counted toward the general finance option
  - e. Quantitative Finance
    - i. Statistics 375 or 375H. Completing this requirement will also fulfill the requirement for the statistics course listed in item 7.a.v of the BBA degree requirements (p. 56)
    - ii. Finance 374C
    - iii. Finance 377 (Topic 2: Financial Risk Management) or 377 (Topic 5: Energy Financial Risk Management)
    - iv. One of the following courses: Finance 371M, 372, 373, 374S, 376, 377 (Topic 1: *Portfolio Analysis and Management*), and either 377 (Topic 3: *Security Analysis*) or 377 (Topic 4: *Financial Analysis*)
    - v. One of the following courses: Statistics 372 (Topic 5: Financial and Econometric Time Series Modeling), 372 (Topic 6: Optimization Methods in Finance), 372 (Topic 7: Computational Finance), Management Information Systems 373 (Topic 17: Data Mining for Business Intelligence), Finance 366P
  - f. Real Estate

- i. Finance 371M
- ii. One of the following courses: Finance 377 (Topic 3: Security Analysis) or 377 (Topic 4: Financial Analysis), 374S, 374C
- iii. Six semester hours of coursework in real estate
- iv. An independent research course may not be counted toward the real estate option
- g. Finance with Required Accounting Minor
  - i. Twelve semester hours of upper-division coursework in finance; up to six hours may be taken in real estate. The following courses may **not** be used to fulfill this requirement: Finance 357, 367, and 370. Finance 377 (Topic 2: *Financial Risk Management*) and 377 (Topic 5: *Energy Financial Risk Management*) may not both be used. Finance 377 (Topic 3: *Security Analysis*) and 377 (Topic 4: *Financial Analysis*) may not both be used; Topic 3 is open only to students in the Financial Analyst Program.
    - Students may choose to complete this requirement with
       the finance course requirements for any one of tracks a-f
  - ii. Accounting Minor for Business Majors (p. 67), completed in full
  - iii. An independent research course may not be counted toward the finance with accounting minor option
- 5. Additional elective coursework, if necessary, to provide a total of at least 120 semester hours

## Finance Suggested Arrangement of Courses

#### First Year

Filst feat		
First Term	Hours Second Term	Hours
M 408K, 408C, or 408N	4 M 408L, 408D, or 408S	4
RHE 306	3 MIS 301	3
Approved PSY/SOC/ANT/EDP	3 Visual and performing arts	3
UGS 302 or 303	3 B A 101S	1
ECO 304K	3 ECO 304L	3
	16	14
Second Year		
First Term	Hours Second Term	Hours
B A 324	3 ACC 312	3
STA 309	3 FIN 357	3
ACC 311	3 STA 371G	3
Science and technology part I	3 GOV 310L	3
American history	3 Science and technology part I	3
	15	15
Third Year		
First Term	Hours Second Term	Hours
FIN 367	3 Finance track course	3
E 316L, 316M, 316N, or 316P	3 ACC 326	3
MKT 337	3 American history	3
Science and technology part II	3 Free elective	3
GOV 312L	3 MAN 336 or 0 M 335	3
	15	15
Fourth Year		
First Term	Hours Second Term	Hours
B A 353	3 FIN 370	3
Finance track course	3 Finance track course	3
Finance track course	3 LEB 323	3
Upper-division nonbusiness elective	3 Upper-division nonbusiness elective	3
Free elective	3 Free elective	3
	15	15

Total credit hours: 120

Note: Schedule to be adjusted depending on student's plans, incoming credits, and course availability.

Note: Students should check their Interactive Degree Audit and with their academic adviser about number and type of electives required.

# **International Business**

Recognizing the role of the United States in world affairs and the importance of international operations to American business enterprise, this major offers a combination of basic business knowledge with an interdisciplinary study of international policies and practices. The curriculum is designed to develop competency to function effectively in a specific region of the world and to prepare students for positions in global business operations, government, or international agencies in the fields of economic development and/or international trade.

The requirements of this program are:

- 1. The Core Curriculum (p. 23) requirements and the BBA Degree Requirements (p. 56)
- Twelve semester hours of coursework in a foreign language associated with the area studies specialization used to fulfill requirement 6 below. A minimum of six of the 12 required hours must be at the upper-division level
- 3. International Business 350 (may fulfill the independent inquiry flag) or 350S, and 378 (certain sections may fulfill the writing, independent inquiry, and global cultures flags)
- 4. Six semester hours chosen from the following courses: Finance 376, International Business 340S, 372, and Marketing 372 (Topic 4: *Global Marketing*). Other courses on the global dimensions of key business areas (e.g. "International Accounting and Taxation" or "Intercultural Management") may also be used for this I B elective requirement when available, as approved by the international business faculty adviser.
- 5. Three semester hours of business electives
- 6. Nine semester hours of upper-division coursework focused on a specific geographic region. Examples of acceptable fields of study are Latin American studies; Middle Eastern studies; Asian studies; Russian, East European, and Eurasian studies; and specific countries within western Europe (e.g., France, Spain, Germany and others) or other areas related to the student's geographic region. All area study coursework must be approved by the international business faculty adviser.
- 7. All international business majors must study abroad or have an approved international experiential learning program (i.e. foreign internship) for at least one semester or summer session of no less than six weeks. Ideally, the study abroad experience should be in an immersion program that includes courses taken with local students.

Any McCombs School program is acceptable if occurring in a country in which English is not the dominant language, with the exception of faculty-led summer study abroad programs or Maymesters, which may not be used for study abroad credit by International Business majors. In addition, most affiliated study abroad programs available through the University's Study Abroad Office are acceptable, depending on the course of study. The international business faculty adviser must approve all study abroad programs and area studies courses in advance.

Students must earn credit for the equivalent of at least six semester hours during their study abroad period. Credit earned abroad may be used to fulfill other degree requirements if appropriate. An international experiential learning program in the appropriate geographic region which meets the basic experiential learning requirements for all business majors may be used in place of the study abroad requirement with satisfactory documentation and faculty adviser approval.

Note that a student's chosen area of language study, the geographic location of their study abroad and/or experiential learning program, and the focus of the area studies coursework must be in the same geographic region. Those studying Spanish may select either Spain or Latin America for their focus, but not both.

8. Additional elective coursework, if necessary, to provide a total of at least 120 semester hours.

International business majors should note that each student must submit information using the IB Planner (https://utdirect.utexas.edu/ business/ib/planner.WBX) for approval of language courses, area studies courses, and study abroad experience.

### International Business Suggested Arrangement of Courses

First Year		
First Term	Hours Second Term	Hours
M 408K, 408C, or 408N	4 M 408L, 408D, or 408S	4
RHE 306	3 B A 101S	1
ECO 304K	3 Visual and performing arts	3
Approved PSY/SOC/ANT/EDP	3 MIS 301	3
UGS 302 or 303	3 ECO 304L	3
	16	14
Second Year		
First Term	Hours Second Term	Hours
ACC 311	3 ACC 312	3
B A 324	3 Upper-division foreign language	3
GOV 310L	3 Science and technology part I	3
Foreign language	6 STA 309	3
	MKT 337	3
	15	15
Third Year		
First Term	Hours Second Term	Hours
STA 371G	3 FIN 357	3
GOV 312L	3 Area studies	3
I B 350	3 International business elective	3
Upper-division foreign language	3 MAN 336 or O M 335	3
Science and technology part I	3 Business elective	3
	15	15
Fourth Year		
First Term	Hours Second Term	Hours
B A 353	3 I B 378 (offered in spring only)	3
LEB 323	3 International business elective	3
E 316L, 316M, 316N, or 316P	3 Area studies	3
Area studies	3 Science and technology part II	3
American history	3 American history	3
	15	15

Total credit hours: 120

Note: Schedule to be adjusted depending on student's plans, incoming credits, and course availability

Note: Students should check their Interactive Degree Audit and with their academic adviser about number and type of electives required

## Management

The Department of Management offers courses in such areas as consulting, change management, human capital management, and entrepreneurship. Students may either choose from the available courses to customize a major in general management, or follow the focused curriculum in consulting and change management.

The major objective of the general management track is to train broadly competent administrators for service in a wide variety of organizations —public or private, product- or service-oriented, profit or not-for-profit. To accomplish this basic objective, the program offers the student the opportunity to acquire knowledge about the management of human and physical resources and to acquire skills useful in the management of any organization.

The consulting and change management track is designed to prepare students to become leaders in consulting firms, firms that require consulting advice, and firms implementing important changes. At times, every organization must renew its ability to compete; many firms use external advisers to assist in the renewal process. The consulting process often involves extensive analysis of the firm's competitive position, capabilities, organizational processes, and culture. Once a new direction is developed, the implementation of change must be managed. Such changes include introduction of new competitive thrusts, revision of organizational structures, incorporation of new technologies, and expansion into new geographic markets.

### **General Management Track**

The requirements of the general management track are:

- 1. The Core Curriculum (p. 23) requirements and the BBA Degree Requirements (p. 56)
- 2. Management 336 or 336H (may fulfill the ethics flag)
- 3. Management 374 (may fulfill the writing and independent inquiry flags)
- 4. Operations Management 335 or 335H or 334M
- 5. Twelve semester hours of upper-division coursework in management \*see note below
- Six semester hours of upper-division coursework in social science (anthropology, economics, government, history, linguistics, geography, psychology, sociology)
- 7. Additional elective coursework, if necessary, to provide a total of at least 120 semester hours

\*Please note that practicum courses (Management 347P, 366P, 367P, 369P) may be used to satisfy a management elective or the BBA experiential learning requirement, but one class may not be used to satisfy both.

### Consulting and Change Management Track

The requirements of the consulting and change management track are:

- 1. The Core Curriculum (p. 23) requirements and the BBA Degree Requirements (p. 56)
- 2. Management 328
- 3. Management 336 or 336H (may fulfill the ethics flag)
- 4. Management 374 (may fulfill the writing and independent inquiry flags)
- 5. Operations Management 335 or 335H or 334M

- 6. Nine semester hours chosen from the following courses: Accounting 329, any upper-division course in management, Operations Management 337 (Topic 1: *Total Quality Management*). The following topics of Management 337 are recommended: Topic 9: *Leadership Issues*, Topic 20: *Entrepreneurial Management*, and *Strategic Change and Innovation*, Topic 21: *Art and Science of Negotiation*, Topic 22: *Women in Management* \*see note below
- Six semester hours of upper-division coursework in social science (anthropology, economics, government, history, linguistics, geography, psychology, sociology)
- 8. Additional elective coursework, if necessary, to provide a total of at least 120 semester hours

\*Please note that practicum courses (Management 347P, 366P, 367P, 369P) may be used to satisfy a management elective or the BBA experiential learning requirement, but one class may not be used to satisfy both.

### **Entrepreneurship Track**

The requirements of the entrepreneurship track are:

- 1. The Core Curriculum (p. 23) requirements and the BBA Degree Requirements (p. 56)
- 2. Management 336 or 336H (may fulfill the ethics flag)
- 3. Management 374 (may fulfill the writing and independent inquiry flags)
- 4. Operations Management 335 or 335H or 334M
- 5. Management 327 or 327H
- 6. Management 327E
- 7. Three semester hours upper-division management \*see note below
- 8. Three semester hours chosen from the following courses: Management 347P, 366P, 367P, 369P *\*see note below*
- Six semester hours of upper-division coursework in social science (anthropology, economics, government, history, linguistics, geography, psychology, sociology)
- 10. Additional elective coursework, if necessary, to provide a total of at least 120 semester hours

\*Please note that practicum courses (Management 347P, 366P, 367P, 369P) may be used to satisfy a management elective or the BBA experiential learning requirement, but one class may not be used to satisfy both.

### Management Suggested Arrangement of Courses

First Year		
First Term	Hours Second Term	Hours
M 408K, 408C, or 408N	4 M 408L, 408D, or 408S	4
RHE 306	3 B A 101S	1
ECO 304K	3 ECO 304L	3
Approved PSY/SOC/ANT/EDP	3 MIS 301	3
UGS 302 or 303	3 Visual and performing arts	3
	16	14
Second Year		
First Term	Hours Second Term	Hours
ACC 311	3 ACC 312	3
B A 324	3 MAN 336	3
E 316L, 316M, 316N, or 316P	3 STA 309	3
GOV 310L	3 MKT 337	3
Science and technology part I	3 Science and technology part I	3
	15	15

First Term	Hours Second Term	Hours
Management elective	3 Management elective	3
O M 335	3 FIN 357	3
STA 371G	3 GOV 312L	3
American history	3 Upper-division social science	3
Science and technology part II	3 American history	3
	15	15
Fourth Year		
First Term	Hours Second Term	Hours
B A 353	3 MAN 374	3
Management elective	3 Management elective	3
Upper-division social science	3 LEB 323	3
Free elective	3 Free elective	3
Free elective	3 Free elective	3
	15	15

Total credit hours: 120

Third Year

Note: Schedule to be adjusted depending on student's plans, incoming credits, and course availability

Note: Students should check their Interactive Degree Audit and with their academic adviser about number and type of electives required

# **Management Information Systems**

There is a great demand for individuals with knowledge about both business and computer applications. Through a series of business core courses and business computer courses, the program in management information systems is intended to prepare a professional who can fully appreciate the complexity of information system design. The graduate is expected to have both the technical and the managerial knowledge to solve fundamental business problems in inventory control, production, forecasting, finance, cost accounting, and other areas. Courses are designed to provide a foundation in the integration of hardware, software, networking, and business functional analysis for business systems.

The requirements of this program are:

- 1. The Core Curriculum (p. 23) requirements and the BBA Degree Requirements (p. 56)
- 2. Management Information Systems 304, 325, 333K, 374, and 375 (may fulfill the writing and independent inquiry flags)
- 3. Six additional semester hours of upper-division coursework in management information systems
- 4. Additional elective coursework, if necessary, to provide a total of at least 120 semester hours

### Management Information Systems Suggested Arrangement of Courses

First Year		
First Term	Hours Second Term	Hours
M 408K, 408C, or 408N	4 M 408L, 408D, or 408S	4
RHE 306	3 B A 101S	1
ECO 304K	3 ECO 304L	3
Approved PSY/SOC/ANT/EDP	3 MIS 301	3
UGS 302 or 303	3 Visual and performing arts	3
	16	14
Second Year		
First Term	Hours Second Term	Hours
MIS 304	3 MIS 325	3
ACC 311	3 ACC 312	3

GOV 310L	3 B A 324	3
STA 309	3 GOV 312L	3
Science and technology part I	3 Science and technology part I	3
	15	15
Third Year		
First Term	Hours Second Term	Hours
MIS 333K	3 MIS upper-division elective	3
STA 371G	3 MKT 337	3
Free elective	3 E 316L, 316M, 316N, or 316P	3
American history	3 American history	3
Science and technology part II	3 Upper-division nonbusiness elective	3
	15	15
Fourth Year		
First Term	Hours Second Term	Hours
B A 353	3 MIS 375	3
MIS 374	3 LEB 323	3
MIS upper-division elective	3 FIN 357	3
MAN 336 or O M 335	3 Free elective	3
Upper-division nonbusiness elective	3 Free elective	3
	15	15

Total credit hours: 120

Note: Schedule to be adjusted depending on student's plans, incoming credits, and course availability.

Note: Students should check their Interactive Degree Audit and with their academic adviser about number and type of electives required.

## Marketing

Marketers help the firm discover and utilize new technological and market opportunities. Their motivation is to create strong brands and loyal customers in the ever-shifting competitive landscape. This is possible through the efforts of marketers to identify the customers with needs the firm is best positioned to meet. Marketers ensure the firm is offering customers well-designed products and services at just the right price, and makes the products available through the right distribution channels, while promoting product offerings through innovative, informative, and persuasive communications. Career opportunities in marketing exist in every industry, no matter the type and size of business.

The requirements of this program are:

- 1. The Core Curriculum (p. 23) requirements and the BBA Degree Requirements (p. 56)
- International Business 350 (may fulfill the independent inquiry flag), Marketing 460 (may fulfill the quantitative reasoning flag), and 370 (may fulfill the writing flag)
- 3. Nine semester hours chosen from the following courses: Marketing 338, 340S, 363, 366P (may be used as an elective or to satisfy the experiential learning requirement, but not both), 370K, or 372 (any topic)
- 4. Additional elective coursework, if necessary, to provide a total of at least 120 semester hours

For course planning, Marketing majors should carefully consider the prerequisites for Marketing 370: 90 semester hours of college coursework, including Marketing 460; credit or registration for an approved experiential learning course; and three additional semester hours of elective coursework in marketing.

## Marketing Suggested Arrangement of Courses

First Year		
First Term	Hours Second Term	Hours
M 408K, 408C, or 408N	4 B A 101S	1
RHE 306	3 M 408L, 408D, or 408S	4
ECO 304K	3 ECO 304L	3
Approved PSY/SOC/ANT/EDP	3 MIS 301	3
UGS 302 or 303	3 Visual and performing arts	3
	16	14
Second Year		
First Term	Hours Second Term	Hours
ACC 311	3 ACC 312	3
B A 324	3 MKT 337	3
STA 309	3 STA 371G	3
GOV 310L	3 GOV 312L	3
Science and technology part I	3 Science and technology part I	3
	15	15
Third Year		
First Term	Hours Second Term	Hours
MKT 460	4 Marketing elective	3
Marketing elective	3 I B 350	3
MAN 336 or O M 335	3 FIN 357	3
American history	3 American history	3
Science and technology part II	3 E 316L, 316M, 316N, or 316P	3
	16	15
Fourth Year		
First Term	Hours Second Term	Hours
B A 353	3 MKT 370	3
Marketing elective	3 Upper-division nonbusiness elective	3
LEB 323	3 Free elective	3
Upper-division nonbusiness elective	3 Free elective	3
Free elective	3 Free elective	2
	15	14

Total credit hours: 120

Note: Schedule to be adjusted depending on student's plans, incoming credits, and course availability

Note: Students should check their Interactive Degree Audit and with their academic adviser about number and type of electives required

### Science and Technology Management

Science and engineering technology enterprises have a great demand for managers who are not only skilled at business, but who also understand the principles underlying the science, technology, and engineering ventures they must manage. To fill this need, the program of study for the BBA in science and technology management provides a sound foundation in mathematics, in science, and in business, qualifying the student for more advanced study in the management of technological, engineering, and scientific enterprises.

Students work closely with the faculty adviser in the Department of Information, Risk, and Operations Management.

All students must take the courses listed below, with a minimum of 48 semester hours in the McCombs School of Business. Prerequisites for all courses are given in this catalog. Other requirements of the Cockrell School of Engineering must also be fulfilled.

The requirements of this program are:

- 1. The Core Curriculum (p. 23) requirements and the BBA Degree Requirements (p. 56), with the following specifications:
  - a. Students in this program must complete Mathematics 408C (may fulfill the quantitative reasoning flag) and 408D; or 408K (may fulfill the quantitative reasoning flag), 408L, and 408M;
  - b. Operations Management 335 or 335H or 334M is required.
- 2. Operations Management 337 (Topic 5: Project Management);
- 3. One of the following four business blocks:
  - a. General Business Block: Accounting 329, either Finance 374C or Finance 374S, and either Management 374 or Management Information Systems 375 (both may fulfill the writing and independent inquiry flags), whichever course is not used to fulfill requirement 4 below;
  - b. Finance Business Block: Finance 367, Finance 374C or Finance 374S, and one other upper-division Finance course;
  - c. Supply Chain Management Business Block: Operations Management 368, 338, and one other upper-division O M course;
  - d. Management Information Systems Business Block: Three upper-division Management Information Systems courses; or Management Information Systems 304 and two upper-division Management Information Systems courses.
- Either Management 374 (may fulfill the writing and independent inquiry flags) or Management Information Systems 375 (may fulfill the writing and independent inquiry flags);
- 5. Nonbusiness courses:
  - a. Chemistry 301 (may fulfill the quantitative reasoning flag); Chemistry 301 also fulfills part II of the core curriculum science and technology requirement;
  - Physics 303K, 303L (both may fulfill the quantitative reasoning flag), 103M, and 103N; the physics sequence also fulfills part I of the core curriculum science and technology requirement;
  - c. Mathematics 427J (may fulfill the quantitative reasoning flag).
- 6. Engineering courses:
  - Engineering Mechanics 306, or Mechanical Engineering 320 or 310T;
  - b. Electrical Engineering 302 and 306;
  - c. One of the following courses: Aerospace Engineering 374K, Mechanical Engineering 375K, or Engineering Studies 377E.
- 7. Additional elective coursework, if necessary, to provide a total of at least 120 semester hours.

## Science and Technology Management Suggested Arrangement of Courses

First Year		
First Term	Hours Second Term	Hours
M 408C	4 B A 101S	1
RHE 306	3 M 408D	4
ECO 304K	3 ECO 304L	3
Approved PSY/SOC/ANT/EDP	3 MIS 301	3
UGS 302 or 303	3 Visual and performing arts	3
	16	14
Second Year		
First Term	Hours Second Term	Hours
ACC 311	3 ACC 312	3
M 427J	4 CH 301	3
E 316L, 316M, 316N, or 316P	3 B A 324	3
STA 309	3 O M 335	3

	GOV 310L	3
	13	15
Third Year		
First Term	Hours Second Term	Hours
E E 306	3 FIN 357	3
STA 371G	3 PHY 303L	3
PHY 303K	3 PHY 103N	1
PHY 103M	1 Free elective	3
GOV 312L	3 American history	3
American history	3 E E 302	3
	16	16
Fourth Year		
First Term	Hours Second Term	Hours
B A 353	3 MAN 374 or MIS 375	3
LEB 323	3 Business block course	3
Business block course	3 ASE 374K, M E 375K, or E S 377E	3
O M 337 (Topic 5: Project Management)	3 Business block course	3
M E 310T or E M 306	3 American history	3
	MKT 337	3
	15	18

Total credit hours: 123

Note: Schedule to be adjusted depending on student's plans, incoming credits, and course availability

Note: Students should check their Interactive Degree Audit and with their academic adviser about number and type of electives required

# **Supply Chain Management**

The supply chain management major is designed to prepare students to become leaders in supply chain management, a total systems approach taken by companies, suppliers, and partners to deliver manufactured products and services to the end customer. Information technology is used to integrate all elements of the supply chain from sourcing parts to coordination of retailers; this integration gives the enterprise a competitive advantage that is not available in traditional logistics systems. Entry-level positions in supply chain management include buyer, materials manager, risk management analyst, logistics planner, and staff consultant. Students work closely with the faculty adviser in the Department of Information, Risk, and Operations Management.

The requirements of this program are:

- 1. The Core Curriculum (p. 23) requirements and the BBA Degree Requirements (p. 56)
- 2. Management 336 or 336H (both may fulfill the ethics flag)
- 3. Operations Management 335 or 335H or 334M
- Operations Management 337 (Topic 3: *Procurement and Supplier Management*) (may fulfill the writing and independent inquiry flags), 338 (may fulfill the quantitative reasoning flag), 367, and 368
- Six additional semester hours of upper-division coursework in Operations Management or Management 337 (Topic 21: *The Art and Science of Negotiation*)
- Additional elective coursework, if necessary, to provide a total of at least 120 semester hours

# Supply Chain Management Suggested Arrangement of Courses

First Year		
First Term	Hours Second Term	Hours
M 408K, 408C, or 408N	4 M 408L, 408D, or 408S	4
RHE 306	3 B A 101S	1
ECO 304K	3 ECO 304L	3
Approved PSY/SOC/ANT/EDP	3 MIS 301	3
UGS 302 or 303	3 Visual and performing arts	3
	16	14
Second Year		
First Term	Hours Second Term	Hours
ACC 311	3 ACC 312	3
B A 324	3 O M 335	3
STA 309	3 STA 371G	3
GOV 310L	3 GOV 312L	3
Science and technology part I	3 Science and technology part I	3
	15	15
Third Year		
First Term	Hours Second Term	Hours
O M 338	3 O M 368	3
E 316L, 316M, 316N, or 316P	3 FIN 357	3
MKT 337	3 MAN 336	3
American history	3 Upper-division nonbusiness elective	3
Science and technology part II	3 American history	3
	15	15
Fourth Year		
First Term	Hours Second Term	Hours
B A 353	3 LEB 323	3
O M 337 (Topic 3)	3 O M 367	3
Operations management elective	3 Operations management elective	3
Free elective	3 Free elective	3
Upper-division nonbusiness elective	3 Free elective	3
	15	15
Tatal andit having 120		

Total credit hours: 120

Note: Schedule to be adjusted depending on student's plans, incoming credits, and course availability

Note: Students should check their Interactive Degree Audit and with their academic adviser about number and type of electives required

# **Minor and Certificate Programs**

### Minor

The transcript-recognized undergraduate academic minor must be completed in conjunction with an undergraduate degree at The University of Texas at Austin; students pursuing an integrated undergraduate/graduate program must complete the requirements for the minor within one year after completing the undergraduate requirements of their program. For more information regarding the requirements for achieving a minor, including a comprehensive list of minors, please visit the Minor and Certificate Programs (p. 13) section of the *Undergraduate Catalog*.

Students admitted to transcript-recognized minors must contact their academic advisers to have approved minors added to their degree audit profiles. This allows progress toward the credential to be tracked and ensures that minors are added to official transcripts upon graduation, if all requirements are met.

The McCombs School of Business offers minors for different student populations:

- Minors for Business Majors available only to degree-seeking McCombs School of Business students, in six individual business fields of study
- The Business Minor a foundational exposure to the primary business fields of study, available to any degree-seeking student outside of the business school (non-business majors)
- 3. Accounting Minor for Business Economics Option Program, and Finance Minor for Business Economics Option Program – available only to degree-seeking Economics majors who have been admitted to the BEOP
- 4. Entrepreneurship Minor available to all undergraduate majors

### **Minors for Business Majors**

While a minor is not required as part of the BBA degree program, a student may choose to complete a minor in conjunction with their degree, in either a second business field or a field outside the school, which offers a minor and for which the student is eligible. A BBA student may complete only one minor, which must be in a different field of study from his or her major.

The business school offers six Minors for Business Majors, which are available only to students enrolled in the McCombs School of Business: Accounting, Finance, Management, Management Information Systems, Marketing, and Supply Chain Management.

To fulfill a Minor for Business Majors, students must complete 15 semester hours of coursework as described below in the requirements of the selected minor. The University requires at least nine hours of the minor to be coursework not used to satisfy requirements of the student's major. This means that only B A 324/H and the core business course required for the minor (i.e. ACC 312/H, FIN 357/H, MAN 336/H, MIS 301/ H, MKT 337/H, O M 335/H) can satisfy both BBA degree requirements and business minor requirements simultaneously; the remaining nine hours for each business minor cannot be coursework used to satisfy other BBA degree requirements, except free or non-business electives. At least half of the coursework must be completed in residence at The University of Texas at Austin. All coursework must be taken on the lettergrade basis, and completed in conjunction with the students' major requirements.

Registration for any of these courses will require that existing prerequisite course requirements are adequately met.

### Accounting Minor for Business Majors

The Accounting Minor for Business Majors requirements are:

Requirements	Hours	
B A 324	Business Communication: Oral and Written	3
or B A 324H	Business Communication: Oral and Written: Honors	
ACC 312	Fundamentals of Managerial Accounting	3
or ACC 312H	Fundamentals of Managerial Accounting: Honors	
ACC 326	Financial AccountingIntermediate	3
Six additional semester hours of upper-division coursework in accounting		6
Diagon Noto:		

Please Note:

All classes must be taken on the letter-grade basis. The student must earn a combined grade point average of at least 2.00 in these courses.

Finance majors who wish to pursue an Accounting Minor may only do so by selecting the Finance Track with Required Accounting Minor.

### **Finance Minor for Business Majors**

The Finance Minor for Business Majors requirements are:

Requirements	Но	urs
B A 324	Business Communication: Oral and Written	3
or B A 324H	Business Communication: Oral and Writ Honors	ten:
FIN 357	Business Finance	3
or FIN 357H	Business Finance: Honors	
FIN 367	Investment Management	3
Six additional semester h	nours chosen from the following	6
courses:		
One of:		
FIN 371M	Money and Capital Markets	
FIN 375F	Banking and Financial Intermediation	
One or two of:		
FIN 372	Advanced Topics in Finance (any topic)	
FIN 374C	Valuation	
FIN 374S	Entrepreneurial Finance	
FIN 376	International Finance	
FIN 377	Advanced Investment Analysis (Topic 1 Portfolio Analysis and Management)	
FIN 377	Advanced Investment Analysis (Topic 4 Financial Analysis)	
One of:		
FIN 377	Advanced Investment Analysis (Topic 2 Financial Risk Management)	
FIN 377	Advanced Investment Analysis (Topic 5 Energy Financial Risk Management)	
One topic of:		
FIN 340S	Topics in Finance (any topic; only three hours of FIN 340S may be used)	
One of:		
R E 358	Introduction to Real Estate and Urban Land Development	
R E 378K	Real Estate Finance and Syndication	
Please Note:		
	n on the letter-grade basis. The	

All classes must be taken on the letter-grade basis. The student must earn a combined grade point average of at least 2.00 in these courses.

Independent Research and Practicum courses may not be applied to the Finance minor.

For students pursuing the integrated approach BBA/MPA degree, nine hours for the Finance minor must be taken in addition to the Finance 367 course and the business elective required for the integrated BBA/MPA degree, in order to obtain a Finance Minor.

### **Management Minor for Business Majors**

The Management Minor for Business Majors requirements are:

Requirements	Hours	
B A 324	Business Communication: Oral and Written	3
or B A 324H	Business Communication: Oral and Written: Honors	
MAN 336	Organizational Behavior	3
or MAN 336H	Organizational Behavior: Honors	
Nine additional semester hours of upper-division coursework in management		9
Please Note:		

All classes must be taken on the letter-grade basis. The student must earn a combined grade point average of at least 2.00 in these courses.

# Management Information Systems Minor for Business Majors

The Management Information Systems Minor for Business Majors requirements are:

Requirements	Hours	
B A 324	Business Communication: Oral and Written	3
or B A 324H	Business Communication: Oral and Written: Honors	
MIS 301	Introduction to Information Technology Management	3
or MIS 301H	Introduction to Information Technology Management: Honors	
One of the following:		9
	ster hours of upper-division ement information systems	
or		
MIS 304	Introduction to Problem Solving and Programming	
And six additional semester hours of upper-division coursework in management information systems		
Please Note:		
	n on the letter-grade basis. The Ibined grade point average of at least	

### **Marketing Minor for Business Majors**

The Marketing Minor for Business Majors requirements are:

Requirements	Hours	
B A 324	Business Communication: Oral and Written	3
or B A 324H	Business Communication: Oral and Written: Honors	
MKT 337	Principles of Marketing	3
or MKT 337H	Principles of Marketing: Honors	

Nine additional semester hours of upper-division coursework in marketing

Please Note:

All classes must be taken on the letter-grade basis. The student must earn a combined grade point average of at least 2.00 in these courses.

### Supply Chain Management Minor for Business Majors

The Supply Chain Management Minor for Business Majors requirements are:

Requirements	Hours	
B A 324	Business Communication: Oral and Written	3
or B A 324H	Business Communication: Oral and Written: Honors	
0 M 335	Operations Management	3
or O M 335H	Operations Management: Honors	
or 0 M 334M	Healthcare Operations Management	
Nine additional semester	r hours of upper-division coursework	9

in operations management

Please Note:

All classes must be taken on the letter-grade basis. The student must earn a combined grade point average of at least 2.00 in these courses.

### **Minors for Non-Business Majors**

### The Business Minor

The Business Minor is designed to provide a foundation in business concepts and practice for students in non-business majors. Any nonbusiness student with a University grade point average of at least 2.00 may take any of the business foundations course listed below, whether pursuing the Business Minor or not. Students who intend to complete the Business Minor must apply online for admission. Students must be admitted to the minor, have it added to their degree profiles, and successfully complete all requirements for it to appear on their transcripts.

To fulfill the Business Minor, students must complete 18 semester hours of coursework as described below. At least half of the coursework must be completed in residence at the University. All coursework must be taken on the letter-grade basis and completed in conjunction with the student's major requirements. It is recommended, but not required, that students also complete a course in economics. While not assumed in the business foundations courses, knowledge of economics can be helpful for understanding business concepts.

Students cannot register for the upper-division Foundations courses below until they have successfully completed 60 semester hours of coursework.

Requirements		Hours
•		Hours
Accounting Requirement	t	3 or 6
ACC 310F	Foundations of Accounting	
or		
ACC 311	Fundamentals of Financial	
& ACC 312	Accounting	
	and Fundamentals of Managerial	
	Accounting <sup>1</sup>	
Management Informatio	n Systems Requirement	3

MIS 302F	Foundations of Information Technology Management (or equivalent) <sup>2</sup>	
Finance Requirement		3
FIN 320F	Foundations of Finance	
or		
FIN 357	Business Finance <sup>1</sup>	
Management Requirement	nt	3
MAN 320F	Foundations of Management and Organizational Behavior <sup>3</sup>	
or		
MAN 336	Organizational Behavior <sup>1</sup>	
Legal Environment of Bus	siness Requirement	3
LEB 320F	Foundations of Business Law and Ethics <sup>3</sup>	
or		
LEB 323	Business Law and Ethics <sup>1</sup>	
Marketing Requirement		3
MKT 320F	Foundations of Marketing <sup>3</sup>	
or		
MKT 337	Principles of Marketing <sup>1</sup>	
Please Note:		

No more than nine of the required 18 hours may be taken on an approved study abroad program. A list of approved programs is available in the University Study Abroad Office.

The student must satisfy the courses used to fulfill minor requirements on the letter-grade basis, except for credit by exam. He or she must earn a combined grade point average of at least 2.00 in these courses.

1. Available to non-business students only in the summer; restricted to business majors during fall and spring.

2. For a full list of pre-approved equivalents, please see the Business Foundations website.

3. Either I B 320F Foundations of International Business or B A 320F Foundations of Entrepreneurship (one course only, not both), may substitute for one of LEB 320F, MAN 320F, or MKT 320F.

# Accounting Minor for Business Economics Option Program

The Accounting Minor for the Business Economics Option Program (BEOP ACC) allows economics majors to take a set of accounting courses and a finance course at the McCombs School of Business for completion of a Minor in Accounting. BEOP ACC students take upperdivision accounting and finance courses to explore how accounting systems utilize economic concepts and how accounting systems solve economic problems; to strengthen the quantitative and analytical skills they acquire as economics majors; and to acquire knowledge and skills in business and accounting.

To participate in the BEOP ACC Minor, students must apply to and be accepted into the Accounting Track of the BEOP through the Department of Economics. To be eligible for the Accounting Track of the BEOP, a student must:

- · be a declared economics major;
- · have a cumulative University GPA of at least 3.00;

- have an economics GPA of at least 3.00 (based on economics coursework taken at The University of Texas at Austin); and
- have earned a grade of at least C- in Economics 420K.

Students must contact the Department of Economics to apply, and for **all** questions about the Business Economics Option Program.

To obtain the BEOP ACC Minor, a student must complete 15 semester hours of coursework as described below. At least half of the coursework must be completed in residence at the University. All coursework must be taken on the letter-grade basis. The student must fulfill the requirements for an economics major and apply to graduate with an economics major, in addition to fulfilling the BEOP ACC Minor requirements, in order to receive the BEOP ACC TRM.

Registration for any of these courses will require that existing prerequisite course requirements are adequately met.

Requirements		Hours	
ACC 311	Fundamentals of Financial Accounting		3
ACC 312	Fundamentals of Managerial Accounting		3
FIN 357	Business Finance		3
Six additional semester hours of upper-division coursework in accounting		6	
Please Note:			
All courses must be	takan an tha lattar grada haaia		

All courses must be taken on the letter-grade basis.

# Finance Minor for Business Economics Option Program

The Finance Minor for the Business Economics Option Program (BEOP FIN) allows economics majors to take a set of accounting courses and finance courses at the McCombs School of Business for completion of a Minor in Finance. BEOP FIN students take lower-division accounting and upper-division finance courses to explore the application of economic concepts and models to finance and financial markets; to strengthen the quantitative and analytical skills they acquire as economics majors; and to acquire knowledge and skills in business and finance.

To participate in the BEOP FIN Minor, students must apply to and be accepted into the Finance Track of the BEOP through the Department of Economics. To be eligible for the Finance Track of the BEOP, a student must:

- · be a declared economics major;
- · have a cumulative University GPA of at least 3.00;
- have an economics GPA of at least 3.00 (based on economics coursework taken at The University of Texas at Austin); and
- have earned a grade of at least C in Economics 329.

Students must contact the Department of Economics to apply, and for **all** questions about the Business Economics Option Program.

To obtain the BEOP FIN Minor, a student must complete fifteen semester hours of coursework as described below. At least half of the coursework must be completed in residence at the University. All coursework must be taken on the letter-grade basis. The student must fulfill the requirements for an economics major and apply to graduate with an economics major, in addition to fulfilling the BEOP FIN Minor requirements, in order to receive the BEOP FIN TRM.

Registration for any of these courses will require that existing prerequisite course requirements are adequately met.

Requirements		Hours	
ACC 311	Fundamentals of Financial Accounting		3
ACC 312	Fundamentals of Managerial Accounting		3
FIN 357	Business Finance		3
FIN 367	Investment Management		3
Three additional semester hours of upper-division coursework in finance			3
Please Note:			

All courses must be taken on the letter-grade basis.

## **Minors for All Majors**

### **Entrepreneurship Minor**

The Entrepreneurship Minor aims to equip students with the perspectives, knowledge, and skills necessary to engage in entrepreneurship, broadly defined to include the launch and development of new businesses as well as the growth and renewal of existing enterprises. The broader objectives of the program include equipping students with talents that will propel their success in a knowledge-based, innovation-driven economy, stimulating entrepreneurship and innovation across a broad range of industries and settings, and transforming students' lives by developing in them a passion for entrepreneurship.

The Entrepreneurship Minor is designed for undergraduate students interested in starting their own business ventures, creating and managing new ventures or products within existing businesses, or generating and implementing new ideas in any role that they hold during their careers. This minor is also well suited for undergraduate students interested in careers in consulting, new product development, technology commercialization, product management, event management, strategy, and business development.

Admission to the minor is based on students' overall academic record, including but not limited to hours and rigor of courses taken in residence, demonstrated interest, and The University of Texas agrade point average.

To fulfill the Entrepreneurship Minor, students must complete 15 semester hours of coursework as described below. At least half of the coursework must be completed in residence at the University. All coursework must be taken on the letter-grade basis, and completed in conjunction with the students' major requirements.

Registration for any of these courses will require that existing prerequisite course requirements are adequately met.

Requirements		Hours	
One of the following courses:			3
Any three hours of lower- or upper-division economics (ECO)			
HDO 301	Introduction to the Human Dimensions of Organizations		
SOC 302	Introduction to the Study of Society		
MAN 327	Innovation and Entrepreneurship		3
or MAN 327H	Innovation and Entrepreneurship: Ho	onors	
MAN 327E	New Venture Mechanics		3
One of the following courses:			3
ADV/P R 332	Technology Marketing and Advertising		
ADV/P R 332C	New Media Entrepreneurialism		
FIN 374S	Entrepreneurial Finance		

	HIS 350R	Undergraduate Seminar in United States History (Topic 12: History of Black Entrepreneurship in the United States)		
	or			
	AFR 374D	Advanced Topics in Black United States Studies (Topic 2: History of Black Entrepreneurship in the United States)		
	J 331M	Media Innovation and Entrepreneurship		
	I B 372	Seminar in International Business (Topic 10: Exporting for Entrepreneurs)		
	MAN 337	Special Topics in Management (Topic 21: The Art and Science of Negotiation)		
	MAN 338	Lean Startup Essentials		
	MKT 372	Marketing Seminar (Topic 5: Design Thinking for Business Innovation)		
	MKT 372	Marketing Seminar (Topic 6: Marketing for Entrepreneurs)		
	RHE 328	Topics in Professional and Technical Writing for Liberal Arts Majors (Topic 4: Writing for Entrepreneurs)		
	RTF 365	Topics in Media and Society (Topic 9: Media Industries and Entrepreneurship)		
	or SOC 352E	Media Industries and Entrepreneurship		
One of the following courses:				
	MAN 337	Special Topics in Management (Topic 2: Interdisciplinary Entrepreneurship)		
	or C S 374L	Longhorn Startup		
	or E S 377E	Interdisciplinary Entrepreneurship: Elective		
	E E 364E	Interdisciplinary Entrepreneurship		
	MAN 347P	Entrepreneurship Practicum		
	MAN 366P	Management Practicum: Social Entrepreneurship I		
	MAN 367P	Social Entrepreneurship II		
	MAN 369P	Social Innovation Practicum		
Ρ	lease Note:			

Other courses may be considered for substitution, as approved by the Entrepreneurship Minor Committee.

All classes must be taken on the letter-grade basis. The student must earn a combined grade point average of at least 2.00 in these courses.

### **Certificate Programs**

Certificate programs in the McCombs School are designed to allow undergraduate students to develop an area of expertise in addition to their major program. The required number of hours to earn any certificate may vary but may not be fewer than 18 and may not exceed 24. Undergraduates who complete transcript-recognized certificate requirements in conjunction with their degree requirements or within one year after earning the degree, receive recognition on the University transcript. At least half of the required certificate coursework must be completed in residence at the University. A maximum of nine hours of certificate coursework may be taken after the student has earned the undergraduate degree.

A student may not earn any transcript-recognized certificate in the same field as his or her major, and at least one certificate course must be outside the requirements of the major. However, certificate courses outside the major may be counted toward other degree requirements.

Students admitted to transcript-recognized certificates must contact their academic advisers to have approved certificates added to their degree audit profiles. This allows progress toward the credential to be tracked and ensures that certificates are added to official transcripts upon graduation, if all requirements are met.

To see a full list of certificates offered at the University, please see The University (p. 15) section of the *Undergraduate Catalog*.

### **Business & Public Policy Certificate**

The Business & Public Policy (BPP) Certificate provides undergraduate students with the opportunity to have an officially recognized concentration in the study of business and public policy. Because firms' actions are increasingly influenced by the interests and demands of numerous stakeholders, including owners, employees, suppliers, customers, NGOs, communities, and especially government regulators, it is increasingly important that businesses hire employees who can strategically respond to and influence these constituencies. Certificate holders will be well-equipped to understand the political process and its influence on firms and to work for those firms or for consulting firms that are increasingly important in this area. This certificate is also well-suited for undergraduates with an interest in careers in law, in governmental and public service, and/or in nonprofit organizations.

The Business & Public Policy Certificate Program requires 18 semester hours of coursework as described below. Students who have completed 24 hours in residence with upper-division standing may formally apply to the certificate program. Admission to the program is based on students' overall academic record. To gain admission the following semester, students must apply by March 10 for fall and by October 10 for spring.

At least half of the required certificate coursework must be completed in residence at The University of Texas at Austin. Students must contact the BPP certificate office to request the BPP certificate the semester they will complete the program; by November 1 for fall, by April 1 for spring, or by August 1 for summer. Students have up to one year after graduation to complete the certificate program for transcript purposes. A maximum of nine hours of certificate coursework may be taken after the student has earned the undergraduate degree.

The certificate requirements are:

Requirements		Hours
GOV 312L	Issues and Policies in American Government	3
Three or four of the follo	wing courses: <sup>1</sup>	9-12
BGS 371	Corporate Political Strategy	
BGS 372	Strategic Corporate Social Responsibility	
BGS 373	Strategic Corporate Communication	
BGS 374	Global Political Economy	
One or two of the following: <sup>1</sup>		3-6
ADV/P R 353	Advertising and Public Relations Law and Ethics	
AMS 310	Introduction to American Studies	
AMS 311S	Introductory Seminar in American Studies	

AMS 321	Studies in American Societies (Topic 5: Asian American Jurisprudence)
BGS 370	Topics in Business, Government, and Society (Topic 2: Ethics, CSR, and Service Learning)
CMS 342K	Political Communication
ECO 321	Public Economics
ECO 341K	Introduction to Econometrics
ECO 333K	Development Economics
ECO 334K	Urban Economics
ECO 339K	International Trade and Investment
or I B 350	International Trade
or I B 320F	Foundations of International Business
or EUS 348	Topics in European Economics, Government, Business, and Policy
For EUS 348, only Top	ic 2 International Trade is accepted
ECO 351K	Current Issues in Business Economics
FIN 371M	Money and Capital Markets
FIN 372	Advanced Topics in Finance (Topic 1: Environmental, Social & Governance Investing )
GOV 325	Political Parties
GOV 351D	The Theoretical Foundations of Modern Politics
GOV 357M	Topics in Public Law (Topic 7: Constitutional Structures of Power)
GOV 358	Introduction to Public Policy
GOV 360N	Topics in International Relations (Topic 13: Global Governance)
GOV 365N	Topics in Comparative Politics (Topic 17: Issues in Third World Development)
GOV 370L	Topics in American Government and Politics (Topic 21: Politics of Food in America)
GOV 370L	Topics in American Government and Politics (Topic 7: The United States Congress)
GOV 379S	Honors Seminar
HIS 350L	Undergraduate Seminar in History (Topic 49: History of Imperialism)
J 350F	Media Law
LEB 323/323H	Business Law and Ethics
or LEB 320F	Foundations of Business Law and Ethics
LEB 363	Real Estate Law
LEB 370	Topics in the Legal Environment of Business (Topic 1: Antitrust Law)
LEB 370	Topics in the Legal Environment of Business (Topic 2: Environmental Law)
LEB 370	Topics in the Legal Environment of Business (Topic 3: Employer- Employee Relations)
LEB 370	Topics in the Legal Environment of Business (Topic 5: The Law and the Multinational Corporation)

LEB 370	Topics in the Legal Environment of Business (Topic 14: Oil and Gas Law)
PHL 325L	Business, Ethics, and Public Policy
P R 305	Fundamentals of Public Relations
P R 317	Writing for Public Relations
P R 352	Strategies in Public Relations
P R 367	Integrated Communications Management
P R 378	Advanced Studies in Public Relations (Topic 5: Integrated Communications for Nonprofit Organizations)
Please Note:	
Oth	under and the second state of the second

Other courses may be considered for substitution, as approved by the Business & Public Policy Certificate Committee.

1. If you have taken Government 312L and only nine hours from: Business, Government, and Society 371, 372, 373, and 374, then choose two courses from the list of electives to satisfy the 18-hour requirement. If you have taken Government 312L and 12 hours from: Business, Government, and Society 371, 372, 373 and 374, then you need take only one course from the list of electives to satisfy the 18-hour requirement.

#### **Other Certificate Requirements:**

The student must satisfy the courses used to fulfill certificate requirements on the letter-grade basis. He or she must earn a combined grade point average of at least 2.00 in these courses.

### **Business of Healthcare Certificate**

Healthcare in the U.S. accounts for 17% of the nation's gross domestic product (more than manufacturing). It is also one of the fastest growing sources of employment; over 12 million Americans work in the industry. The Business of Healthcare Certificate provides students interested in a clinical, academic, or business career in this industry an overview and opportunity to understand the complexities of the US healthcare system as well as the goals and barriers for reform.

The Business of Healthcare Certificate is designed for two groups of students: business majors and non-business majors. Business majors from the McCombs school will be students who plan to pursue an entry-level job in supply chain, marketing, management information systems, or other business function in healthcare industry companies in the areas of pharmaceutics, medical devices, and healthcare informatics. Non-business majors from other schools will be students in a healthcare-related major, including pre-med, pharmacy, nursing, public health and so on, who want to understand the business aspects of the industry that they will enter upon graduation.

The Business of Healthcare Certificate requires 18 semester hours of coursework as described below. Admission to the program is based on students' overall academic record, including but not limited to hours and rigor of courses taken in residence, demonstrated interest, and The University of Texas at Austin grade point average. To gain admission the following semester, students must apply by March 1 for fall and by October 1 for spring.

At least half of the required certificate coursework must be completed in residence at the University. Students must contact the certificate office to request the certificate the semester they will complete the program; by November 1 for fall, by April 1 for spring, or by August 1 for summer. Students have up to one year after graduation to complete the certificate program for transcript purposes. A maximum of nine hours of certificate coursework may be taken after the student has earned the undergraduate degree.

The certificate requirements are:

Requirements		Hours	
One of the following cou	rses:		3
N 309	Global Health		
SOC 308S	Introduction to Health and Society		
H S 301	Introduction to Health and Society		
PBH 317	Introduction to Public Health (non- public healthcare majors section)		
ACC 310F	Foundations of Accounting (for non-business students)		3
or ACC 311	Fundamentals of Financial Accounti	ng	
or ACC 311H	Fundamentals of Financial Accounti Honors	ng:	
0 M 334M	Healthcare Operations Management <sup>1, 2</sup>		3
LEB 334M	Healthcare Law and Policy		3
MAN 334M	Healthcare System Management		3
One of the following courses:			3
ECO 330T	Topics in Economics (Topic 1: Economics of Health)		
ECO 325K	Health Economics		
HED 373	Evaluation and Research Design		
MAN 366P	Management Practicum: Social Entrepreneurship I		
MAN 367P	Social Entrepreneurship II		
Please Note:			
,	onsidered for substitution, as ss of Healthcare Certificate		
1. This class satisfies th	e O M 335 degree requirement for		

1. This class satisfies the 0 M 335 degree requirement for business students.

2. Business Honors Program students must take 0 M 335H , which will satisfy the 0 M 334M requirement for this certificate.

#### **Other Certificate Requirements:**

The student must satisfy the courses used to fulfill certificate requirements on the letter-grade basis. He or she must earn a combined grade point average of at least 2.00 in these courses.

### **Energy Management Certificate**

The certificate in Energy Management is designed to develop decision makers, leaders, and policy builders who have the technical expertise and business acumen to participate in the interdisciplinary teams that will be required to address our energy future.

The Energy Management Certificate requires 18 semester hours of coursework as described below. All students must have completed at least one semester at the University before they may be admitted to the certificate program. Freshmen who wish to participate in the program their first summer must wait until the spring for an admission decision. Admission to the program is based on students' overall academic records. Applications are accepted during the fall and spring for the following summer. Please check the Energy Management (https://www.mccombs.utexas.edu/Centers/Energy-Management-Program) website for application dates for full consideration.

At least half of the required certificate coursework must be completed in residence at The University of Texas at Austin. Students must complete the Energy Management transcript certificate request online to have the EM certificate added to their transcript. This must be done the semester both of these requirements have been met: 1) he or she holds or will hold a degree; and 2) all courses in the program have been successfully completed with a C- or higher. The request must be received by November 1 for fall, April 1 for spring, or August 1 for summer. Students have up to one year after graduation to complete the certificate program for transcript purposes. A maximum of nine hours of certificate coursework may be taken after the student has earned the undergraduate degree, however admitted students may complete all program coursework even if transcript-recognition is not obtained. Students who do not meet transcript-certificate-recognition requirements may still list the program on their resume if they successfully complete all EM certificate courses.

The certificate requirements are:

Requirements		Hours
One of the following courses:		3 or 4
GEO 303	Introduction to Geology	
GEO 401	Physical Geology	
GEO 420H	Honors Introductory Geology	
BGS 370	Topics in Business, Government, and Society (Topic 10: Non- Technical Exploration and Production)	3
GEO 316P	Sedimentary Rocks (for nongeology students)	3 or 4
or GEO 416M	Sedimentary Rocks	
LEB 370	Topics in the Legal Environment of Business (Topic 13: Contracts and Real Property)	3
LEB 370	Topics in the Legal Environment of Business (Topic 14: Oil and Gas Law)	3
BGS 370	Topics in Business, Government, and Society (Topic 1: Energy Technology and Policy)	3

#### **Other Certificate Requirements:**

The student must satisfy the courses used to fulfill certificate requirements on the letter-grade basis. He or she must earn a grade of at least *C*- in these courses.

### **Global Management Certificate**

The Certificate in Global Management offers an officially recognized concentration in the study of international management. In today's workplace, managers lead global teams, interface with international suppliers and customers, and collaborate with international partners. It is vital for firms and organizations to have access to employees who understand global political and economic dynamics, who are able to recognize and adapt to the cultural orientations of multiple constituencies, and who can operate effectively in countries around the world.

The Global Management Certificate requires 18 semester hours of coursework, and six hours of international experience, as described

below. Admission to the program is based on students' overall academic record. To gain admission the following semester, students must apply by March 1 for fall and by October 1 for spring.

At least half of the required certificate coursework must be completed in residence at The University of Texas at Austin. Students must contact the Center for Global Business (https://www.mccombs.utexas.edu/ Centers/CIBER/global-certificate) to request the certificate the semester they will complete the program; by November 1 for fall, by April 1 for spring, or by August 1 for summer. Students have up to one year after graduation to complete the certificate program for transcript purposes. A maximum of nine hours of certificate coursework may be taken after the student has earned the undergraduate degree.

The certificate requirements are:

Requirements		Hours
IRG 320F	Foundations of International Relations and Global Studies	
MAN 336	Organizational Behavior	
or MAN 320F	Foundations of Management and Organizational Behavior	
MAN 137C	Introduction to Management in a Global Environment	
MAN 237D	Global Management Capstone	
Elective Courses		
Three hours of upper div of the following:	ision coursework selected from any	
a. Asian studies		
b. European studies		
c. French civilization		
d. German, Scandinavian	, and Dutch studies	
e. Italian civilization		
f. Latin American studies	3	
g. Middle Eastern studies	5	
h. Portuguese civilization	1	
i. Russian, East Europear		
	spora studies, selected from these	
courses only:		
AFR 372G	Topics in African and African Diasporic Cultures and Languages	
	(Topic 10: Afro-Latin America)	
AFR 372G	Topics in African and African Diasporic Cultures and Languages (Topic 33: Sex and Power in the African Diaspora)	
AFR 372G	Topics in African and African	
	Diasporic Cultures and Languages (Topic 34: Jesus, Africa, and History)	
AFR 373	Independent Research	
AFR 374C	Advanced Topics in African Studies (Topic 4: History of Southern Africa)	
AFR 374C	Advanced Topics in African Studies (Topic 6: Apartheid: South African History)	
AFR 374E	Advanced Topics in the African Diaspora (Topic 2: The Politics of Race and Violence in Brazil)	

AFR 374E	Advanced Topics in the African Diaspora (Topic 4: Reimagining Cuba, 1868-Present)	
AFR 374F	Advanced Topics in Black Expressive Culture (Topic 12: Visual Arts of the Caribbean)	
AFR 374F	Advanced Topics in Black Expressive Culture (Topic 13: Diaspora Visions)	
AFR 374F	Advanced Topics in Black Expressive Culture (Topic 22: Music of Mexico and the Caribbean)	
AFR 679H	Honors Tutorial Course (Part A)	
Three hours of econom	ics coursework	3
Three hours upper-division coursework in international business, trade, and investment selected from the following:		3
I B 350	International Trade	
or I B 320F	Foundations of International Business	
or I B 350S	International Commerce Analysis	
EUS 348	Topics in European Economics, Government, Business, and Policy (Topic 2: International Trade)	
ECO 339K	International Trade and Investment	

#### **Other Certificate Requirements:**

3

3

1

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3

Six hours of "international experience" credit earned on an approved study abroad program and/or pre-approved international internships. Any of the courses above completed abroad can satisfy requirements for both coursework and the international experience.

The student must satisfy the courses used to fulfill certificate requirements on the letter-grade basis. He or she must earn a combined grade point average of at least 2.00 in these courses.

### **Real Estate Certificate**

The Real Estate Certificate program offers degree-seeking undergraduate students from any major the opportunity to explore the commercial real estate industry, learn the basics of real estate financial analysis, and supplement their primary degree with an officially recognized certificate in real estate.

The Real Estate Certificate program requires 18 semester hours of coursework as described below; students must also complete the following prerequisite courses: Accounting 310F (for non-business students) or Accounting 311 (for business students), and Finance 357 (for all students).

In addition, nonbusiness students are strongly urged to complete Economics 301, or 304K and 304L, and a course in introductory statistics.

Upon obtaining credit for Accounting 310F or 311, a student with upper-division standing may apply for conditional admission to the certificate program by the application deadline. Admission (https:// www.mccombs.utexas.edu/Centers/Real-Estate-Center/Academics/ Real-Estate-Certificate) to the program is based on students' overall academic record, including, but not limited to, hours and number of courses taken in residence, demonstrated interest in real estate, and overall The University of Texas at Austin grade point average. The courses necessary to complete the Real Estate Certificate may have additional prerequisites, and admission to the program and instructor approval are required as conditions of enrollment in some courses. At least half the required certificate coursework must be completed in residence at The University of Texas at Austin.

The certificate requirements are:

The certificate requirements are:			
Requirements		Hours	
R E 358	Introduction to Real Estate and Urban Land Development	3	
R E 376G	Real Estate Investment	3	
Elective Courses			
Four of the following: <sup>1</sup>		12 or 13	
McCombs School of Bus	iness courses:		
R E 360	Special Topics in Real Estate (Topic 1: Taxation of Real Estate Investments) <sup>2</sup>		
ACC 378	Contemporary Accounting Topics (Topic 5: Taxation of Real Estate Investments (for accounting majors		
	and minors only) <sup>2</sup>		
or			
ACC 326	Financial AccountingIntermediate (for business majors only) <sup>2</sup>		
FIN 377	Advanced Investment Analysis (Topic 3: Security Analysis (acceptance to the Real Estate Fund program required)		
LEB 363	Real Estate Law		
R E 378K	Real Estate Finance and Syndication		
Courses from other scho	ools:		
ARC 308	Architecture and Society (may fulfill the global cultures flag)		
ARC 318K	World Architecture: Origins to 1750 (may fulfill the global cultures and writing flags)		
ARC 318L	World Architecture: The Industrial Revolution to the Present (may fulfill the global cultures and writing flags)		
ARC 327C	Urban Design History, Theory, and Criticism		
ARC 327E	Alternative Real Estate Action		
ARC 327F	American Dream: Status Quo and Alternatives		
ARC 327R	Topics in Architectural Theory (Topic 3: City as Form and Idea)		
ARC 327R	Topics in Architectural Theory (Topic 11: Global Housing Challenge)		
ARC 327R	Topics in Architectural Theory (Topic 13: Managing the Design Project)		
ARC 327R	Topics in Architectural Theory (Topic 19: Urban Land Institute Workshop)		
ARC 342E	History and Theories of Landscape Architecture I		
ARC 342F	History and Theories of Landscape Architecture II		

ARC 3501	R	Topics in Design Theory (pre- approved topics only)
ARE 323	<	Project Management and Economics
ARE 358		Cost Estimating in Building Construction
ARE 366		Contracts, Liability, and Ethics (may fulfill the ethics flag)
ARE 376		Building Information Modeling for Capital Projects
CRP 3691	K	Principles of Physical Planning (may fulfill the writing flag)
ECO 334	<	Urban Economics
ECO 3341	_	Regional Economics
GRG 310	С	Spatial Data and Analysis
GRG 337		The Modern American City
GRG 356	Т	Topics in Geography (Topic 1: The Culture of Cities (may fulfill the cultural diversity in the United States flag)
GRG 460	G	Environmental Geographic Information Systems
URB 301		Introduction to Urban Studies (for urban studies majors only (may fulfill the cultural diversity in the United States flag)
or GR0	G 307C	Introduction to Urban Studies
URB 354		Topics in Urban Society and Culture (Topic 7: Vienna: Memory and the City)
loaco Noto		

Please Note:

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Other courses may be considered for approval if the topic is deemed appropriate by the Real Estate Certificate program office.

1. At least six hours from outside of the McCombs School; for students who complete the Real Estate Fund program at least three hours from outside of the McCombs School.

2. Only one may be counted from: R E 360 (Topic 1: Taxation of Real Estate Investments), or ACC 378 (Topic 5: Taxation of Real Estate Investments) (for accounting majors and minors only), or ACC 326 Intermediate Accounting (for business majors only)

#### **Other Certificate Requirements**

The student must satisfy the courses used to fulfill certificate prerequisites and requirements on the letter-grade basis. He or she must earn a combined grade point average of at least 2.00 in these courses.

#### Ethics Education Component in the Real Estate Certificate Program

The goals of the ethics education component are to ensure Real Estate Certificate students understand the importance of business ethics and expose them to best practices in ethical decision making. The University requires that all undergraduate students take at least one course with a substantial ethics component (an "ethics flag"). Our intent is to take this further and expose students to ethical issues within a business and/or real estate context. Students will fulfill the Real Estate Certificate program's ethics education component upon completion of Real Estate 358, Introduction to Real Estate and Urban Land Development, which contains a significant ethics component (delivered via lecture, discussion, and/or case analysis).

Additionally, Real Estate Certificate students have the opportunity to take their ethics education further, through a variety of methods:

### 1. Video Delivery

The McCombs School of Business has produced an awardwinning video series entitled, "Ethics Unwrapped," (http:// ethicsunwrapped.utexas.edu/). Each five- to seven-minute video in the series is accompanied by a written transcript, discussion questions, and an extensive reading list. Students may view this selection of videos and then answer related discussion questions.

### 2. Classroom Delivery

Students may complete Legal Environment of Business 363, *Real Estate Law*. This course contains a significant ethics component, which is delivered via a variety of methods (e.g., lecture, discussion, and case analysis).

### 3. Panel Discussion or Speaker Series

Students may attend a panel discussion or speaker series with industry professionals who discuss their personal/professional exposure to ethical dilemmas and ethical best practices within the real estate industry.

### 4. Other

Students may do further research on a topic of interest within the field of ethics by completing a faculty-supervised ethics project or paper, which has been pre-approved by the program administration.

### **Final Transcript Certification**

Students must request transcript certification by emailing the program administration at the time of application for graduation or upon completion of the program requirements, whichever is later. Students have up to one year after graduation to complete the certificate program for transcript purposes. A maximum of nine hours of certificate coursework may be taken after the student has earned the undergraduate degree.

### **Risk Management Certificate**

The business world is increasingly faced with risks from cyber-risk to health care fraud to terrorism, identity theft and financial risks from longevity of life. These risks all have financial consequences that are recurring or crisis. The management of risk is increasingly important in the USA and worldwide. For-Profit and Not-for-Profit enterprises (from charities to government) find themselves confronting risks and the resulting financial consequences daily. Business managers from all areas of expertise need to be prepared to prevent and address risks in order to survive—the ultimate goal of most all enterprises.

The Risk Management Certificate (RMC) provides a student with a tool kit for contemplating, identifying, prioritizing, and formulating approaches to manage varying types of risks inevitably faced. The RM Certificate allows for six hours of free electives (inside or outside of McCombs) as there are many types of risk a particular student might be faced with (e.g., *financial crisis risk, natural disasters* (from hurricanes, tsunami to volcanoes and fires), *cyber risk* (from identify theft, fraud, mobile commerce risks to phishing and hacking, etc.), *risk of political and other crises disrupting supply chains, terrorism* and the *reality that all enterprises operate in an increasingly vulnerable and connected infrastructure.* Indeed, as an example, over 90% of the Fortune 500 companies have created an insurance company subsidiary designed to

help them manage their risks internally (a captive insurer). This allows for both some degree of managerial control and risk transfer to protect the firm. Companies need increasing active risk management expertise to survive.

### Who Should Consider The Risk Management Certificate (RMC)?

The Risk Management Certificate is designed for both business and non-business majors who expect to be in a management position, including entrepreneurs. Examples include all Business majors who plan to pursue an entry-level job in supply chain, finance, manufacturing, insurance, management information systems, marketing or other business functions. Non-business majors can be students in liberal arts, economics, actuarial science, petroleum engineering, retailing, communications, health care or students from any other discipline who want to understand the impact of risk and the management of risk for their future employer.

### **Risk Management Certificate Application and Coursework Requirements**

The Risk Management Certificate Program is both structured and flexible to allow the student to pursue interests in discipline-specific risks as well as general risks that any enterprise might face. Admission to the program requires upper-division standing and a 2.5 GPA, and is based on students' overall academic record. Students must apply to receive the RM Certificate at least one full semester prior to anticipated graduation.

Registration in courses does not require admission to the Risk Management Certificate Program.

At least half of the required certificate coursework (nine hours) must be completed in residence at The University of Texas at Austin. Students must contact the certificate office to request the certificate the semester *before* they will complete the program; by April 1 for fall, by November 1 for spring or summer. This timing facilitates the student's ability to have a semester prior to graduation to complete necessary coursework. Students have up to one year after graduation to complete the certificate program for transcript purposes, and must have applied as per dates above. A maximum of nine hours of certificate coursework may be taken after the student has earned the undergraduate degree.

In order to receive the Risk Management Certificate students must comply with University Rules and Regulations and RMC Program requirements regarding satisfactorily completed coursework and degree completion.

### **Required Coursework for the RMC**

The RMC requires 18 semester hours of coursework as described below. Twelve hours are business coursework: six hours of risk management, three hours of accounting and three hours of finance. An additional six elective hours relevant to risk management are selected by the student, with a maximum of three hours allowed from the McCombs School of Business.

<b>Requirements</b> Risk Management Requirement 1		Hours 3
R M 357E	Introduction to Risk Management	
or		
URB 351	Topics in Urban Economics (Topic 6: Introduction to Risk Management)	
Risk Management Requirement 2		3
R M 377	Property-Liability Risk Management and Planning $^{\rm l}$	
or R M 369K	Managing Employee Risks and Bene	fits

Accounting Requirement	t	3
One of the following:	·	Ŭ
ACC 310F	Foundations of Accounting (for	
ACC STOP	non-business students)	
ACC 311	Fundamentals of Financial Accounting (for business students)	
ACC 311H	Fundamentals of Financial Accounting: Honors (for BHP majors)	
Finance Requirement		3
One of the following:		
FIN 320F	Foundations of Finance (for non- business students)	
FIN 357	Business Finance (for business students)	
FIN 357H	Business Finance: Honors (for BHP majors)	
Elective Courses		
-	rses: (Please note that no more e offered by the McCombs School of	6
Business) <sup>2</sup>	· · · · · · · · · · · · · · · · · · ·	
R M 377	Property-Liability Risk Management and Planning <sup>3</sup>	
or R M 369K	Managing Employee Risks and Benefits	
ACF 329	Theory of Interest	
or M 329F	Theory of Interest	
Any three hours lower Foundations (ACF)	- or upper-division Actuarial	
CMS 354	Conflict Resolution <sup>4</sup>	
CMS 371K	Practicum in Conflict Mediation <sup>4</sup>	
	- or upper-division Economics (ECO)	
FIN 377	Advanced Investment Analysis	
1111 377	(Topic 2: Financial Risk Management)	
Any three hours uppe Business (LEB)	r-division Legal Environment of	
M 339D	Introduction to Financial Mathematics for Actuaries	
M 339J	Probability Models with Actuarial Applications	
M 339U	Actuarial Contingent Payments I	
M 339V	Actuarial Contingent Payments II	
M 339W	Financial Mathematics for Actuarial Applications	
M 349P	Actuarial Statistical Estimates	
MKT 372	Marketing Seminar (Topic 27: Reputational Risk and Crisis Management)	
Plazza Noto:	managementy	

### Please Note:

Other courses may be considered for substitution, as approved by the Risk Management Certificate Program. Courses dealing with conflict resolution, health management, health infrastructure, public policy, governmental regulation, risk management, or security are likely candidates.

1. Risk Management 377 and Risk Management 369K are offered in alternating Fall semesters

2. Risk Management Certificate students must be able to enroll in an elective through their majors and have the required prerequisites - the RMC Program cannot grant or request exceptions to restricted courses, or to prerequisites for elective courses.

3. Whichever was not used to fulfill the certificate requirement above

4. Can be taken second summer only as open enrollment is only available then – web-based course

5. If student can access via open enrollment as majors have preference

### **Other Certificate Requirements:**

The student must satisfy the courses used to fulfill certificate requirements on the letter-grade basis. He or she must earn a combined grade point average of at least 2.00 in these courses.

Please contact the RMC program (https://www.mccombs.utexas.edu/ Departments/IROM/Risk%20Management%20Certificate/Contact%20Us) or Dr. Patrick L. Brockett, Director of the Risk Management Certificate Program, for additional questions and further information.

## Courses

The faculty has approval to offer the following courses in the academic years 2018–2019 and 2019–2020; however, not all courses are taught each semester or summer session. Students should consult the *Course Schedule* (https://registrar.utexas.edu/schedules) to determine which courses and topics will be offered during a particular semester or summer session. The *Course Schedule* (https://registrar.utexas.edu/schedules) may also reflect changes made to the course inventory after the publication of this catalog.

A full explanation of course numbers is given in *General Information* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/credit-value-and-course-numbers). In brief, the first digit of a course number indicates the semester hour value of the course. The second and third digits indicate the rank of the course: if they are 01 through 19, the course is of lower-division rank; if 20 through 79, of upper-division rank; if 80 through 99, of graduate rank.

## **Business Administration**

### **Business Administration: B A**

### **Lower-Division Courses**

### B A 001F. First-Year Interest Group Seminar.

Restricted to students in the First-Year Interest Group Program. Basic issues in various McCombs School of Business disciplines. One lecture hour a week for one semester.

## B A 101H. Professional Development and Career Planning: Honors.

Restricted to students admitted to the McCombs School of Business Honors Program. Professional development issues including selfassessment, identification of personal life goals, identification of business majors and exploration of potential career fields for each major, and analysis and discussion of the academic planning process and how it relates to professional development and career planning. One-and-onehalf lecture hours a week for one semester. Only one of the following may be counted: Business Administration 101H, 101S, 101T. Offered on the letter-grade basis only.

### B A 101S. Professional Development and Career Planning.

Restricted to freshmen students in the McCombs School of Business. Discussion of issues surrounding career planning, implementation, and evaluation in order to establish career goals. Strategies for executing a successful job search, including interviewing techniques, resumes, networking, and job search ethics. Focus on career management as a lifelong process. One-and-one-half lecture hours a week for one semester. Only one of the following may be counted: Business Administration 101H, 101S, 101T. Offered on the letter-grade basis only.

### B A 101T. Professional Development and Career Planning.

Restricted to transfer students in the McCombs School of Business. Discussion of issues surrounding career planning, implementation, and evaluation. One-and-one-half lecture hours a week for one semester. Only one of the following may be counted: Business Administration 101H, 101S, 101T. Offered on the letter-grade basis only.

## B A 105, 205, 305. Topics in Business Administration Leadership.

Restricted to students in the McCombs School of Business. Explores current theory and research related to peer mentoring and leadership with higher education and business. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

### B A 018H. Business Honors Program Seminar.

Restricted to students admitted to the McCombs School of Business Honors Program. Basic issues in various interdisciplinary and business fields of study. One lecture hour a week for one semester. Fulfills the criteria for a 360 Connection. May not be counted toward the Bachelor of Business Administration degree. May be repeated for credit.

## B A 119, 219, 319, 419, 519, 619. International Learning Seminar.

Discussion of various issues related to the academic, cultural, and personal aspects of completing academic work in international locations. For each semester hour of credit earned, one lecture hour a week for one semester. Business Administration 119, 219, 319, 419, 519, 619 and Undergraduate Studies 119 may not both be counted unless the topics vary. May be repeated for credit when the topics vary.

### B A 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Business Administration.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office or the school's BBA Exchange Programs. Credit is recorded as assigned by the Bachelor of Business Administration's study abroad director in the McCombs School of Business. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

### B A 320F. Foundations of Entrepreneurship.

Restricted to non-business majors. Introduction to the mechanics and strategies for starting a business. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

### B A 321L. Contemporary Leadership Issues.

Focuses on leadership topics such as ethics, diversity, and sustainability. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

### B A 324. Business Communication: Oral and Written.

Restricted to students in the McCombs School of Business. Theory and practice of effective communication, using models from business situations. Students practice what they learn with a variety of in-class activities, written assignments, and oral presentations. Teamwork and use of interpersonal skills are included. Three lecture hours a week for one semester. Business Administration 324 and 324H may not both be counted. Offered on the letter-grade basis only. Prerequisite: English 303C or 603A, or Rhetoric and Writing 306 or 306Q or 309K, or Tutorial Course 303C or 603A; and credit or registration for Business Administration 101H or 101S or 101T.

## B A 324H. Business Communication: Oral and Written: Honors.

Restricted to students admitted to the McCombs School of Business Honors Program. Theory and practice of effective communication, using models from business situations. Students practice what they learn with a variety of in-class activities, written assignments, and oral presentations. Teamwork and use of interpersonal skills are included. Three lecture hours a week for one semester. Business Administration 324 and 324H may not both be counted. Offered on the letter-grade basis only. Prerequisite: English 303C or 603A, Rhetoric and Writing 306, 306Q, 309K, or Tutorial Course 303C or 603A; and Business Administration 101H or 101S, or credit or registration for Business Administration 101T.

#### B A 140S, 240S, 340S, 440S, 540S, 640S, 740S, 840S, 940S. Topics in Business Administration.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the Bachelor of Business Administration's study abroad director in the McCombs School of Business. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

## B A 149, 249, 349, 449, 549, 649. International Learning Seminar.

Discussion of various issues related to the academic, cultural, and personal aspects of completing academic work in international locations. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. Business Administration 149, 249, 349, 449, 549, 649 and Undergraduate Studies 119 may not both be counted unless the topics vary. May be repeated for credit when the topics vary.

### B A 151H. Honors Lyceum in Business Administration.

Restricted to students admitted to the McCombs School of Business Honors Program. Presentations by professionals from various fields of business. One lecture hour a week for one semester. May be repeated for credit. Prerequisite: Business Administration 101H or 101S, or credit or registration for Business Administration 101T.

## B A 352F. Internship in Foundations of Business Administration.

Restricted to non-business majors. Focuses on students' career goals through academic discussion and evaluations, while students are working in professional internships with public and private enterprises. Internship to be arranged by the student and approved by the director of the Business Foundations Program. Internship and discussion hours to be arranged. Offered on the pass/fail basis only. Prerequisite: Completion of at least forty-five semester hours of coursework, Accounting 310F with a grade of at least C, and consent of the director of the Business Foundations Program.

### B A 353. Internship in Business Administration.

Restricted to students in a business major. Provides a format for reflection during a professional internship, resulting in improved ability to both articulate preferences and skills, and to match them with appropriate career-related choices. Internship and discussion hours to be arranged. Only one of the following may be counted toward the Bachelor of Business Administration: Accounting 353J, Business Administration 353, 353H, Finance 353, Management 353, Management Information Systems 353, Marketing 353, Operations Management 353. May not be counted toward the student's major requirement. Offered on the pass/fail basis only. Prerequisite: Completion of forty-five semester hours of college coursework and consent of the BBA Internship Director.

## B A 366F. Foundations of Business Administration Practicum.

Restricted to non-business majors. Students apply skills related to the Business Foundations certificate program curriculum and focus on additional project management skills through group projects conducted in a professional setting. Students may work with a private or a public enterprise. The equivalent of three lecture hours a week for one semester. Prerequisite: Upper-division standing and completion of at least forty-five semester hours of coursework.

## B A 176C, 276C, 376C. Advanced Topics in Finance and Accounting.

Restricted to students admitted to courses offered through Texas Executive Education. Rigorous introduction into the topics and processes of accounting and finance in business. Focus on how to apply analytical skills to make better business decisions. Taught by faculty from the McCombs School of Business. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May not be counted toward the Bachelor of Business Administration degree. May be repeated for credit when the topics vary.

### B A 176D, 276D, 376D. Advanced Topics in Marketing.

Restricted to students admitted to courses offered through Texas Executive Education. Explores marketing strategies and practices that are applicable to multiple departments across organizations. Discussion of marketing tactics and the impact of marketing on business operations. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May not be counted toward the Bachelor of Business Administration degree. May be repeated for credit when the topics vary.

## B A 176E, 276E, 376E. Advanced Topics in Leadership and Management.

Restricted to students admitted to courses offered through Texas Executive Education. Discussion of strategies to foster highly effective communication and collaboration in order to become more successful and valuable as a leader. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May not be counted toward the Bachelor of Business Administration degree. May be repeated for credit when the topics vary.

## B A 176F, 276F, 376F. Advanced Topics in Business Analytics.

Restricted to students admitted to courses offered through Texas Executive Education. Introduction to the leading edge of big data and data analytics. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May not be counted toward the Bachelor of Business Administration degree. May be repeated for credit when the topics vary.

### B A 176G, 276G, 376G. Advanced Topics in Supply Chain.

Restricted to students admitted to courses offered through Texas Executive Education. Explores the tools and ideas that help shape and define the various components of value creation. Dive into the process and strategies behind acquiring, producing and delivering goods and services, whether domestically or globally. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May not be counted toward the Bachelor of Business Administration degree. May be repeated for credit when the topics vary.

### B A 176J, 276J, 376J. Advanced Topics in Energy.

Restricted to students admitted to courses offered through Texas Executive Education. Focus on the economics, strategy, business valuation and finance specific to the energy industry. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May not be counted toward the Bachelor of Business Administration degree. May be repeated for credit when the topics vary.

### B A 176K, 276K, 376K. Advanced Topics in Strategy.

Restricted to students admitted to courses offered through Texas Executive Education. Focus on developing the knowledge and thought processes necessary to make high-impact decisions within an organization. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May not be counted toward the Bachelor of Business Administration degree. May be repeated for credit when the topics vary.

## B A 176L, 276L, 376L. Advanced Topics in Strategic Decision Making and Risk Management.

Restricted to students admitted to courses offered through Texas Executive Education. Explores techniques to recognize risks from stakeholders' perspectives. Discussion of how to frame strategic choices, generate alternatives, and create models that answer executives' questions, produce compelling analyses, and ultimately gain commitment. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May not be counted toward the Bachelor of Business Administration degree. May be repeated for credit when the topics vary.

### B A 176N, 276N, 376N. Advanced Topics in Business.

Restricted to students admitted to courses offered through Texas Executive Education. Explores the skill set needed to move from a functional area to a cross functional management role. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May not be counted toward the Bachelor of Business Administration degree. May be repeated for credit when the topics vary.

## B A 178F, 378F. Independent Research in Foundations of Business Administration.

Restricted to non-business majors. Conference course. Prerequisite: Upper-division standing, Accounting 310F with a grade of at least C, consent of instructor, and written approval before the first meeting of the course on a form provided for that purpose from the director of the Business Foundations Program.

## **Department of Accounting**

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

### Accounting: ACC

### **Lower-Division Courses**

### ACC 310F. Foundations of Accounting.

Restricted to non-McCombs School of Business majors. An introduction to financial and managerial accounting, with emphasis on the content, interpretation, and uses of accounting reports. Discussion of the determination and reporting of net income and financial position, and the theories underlying business financial statements; consideration of managerial accounting topics designed to extend the student's knowledge to the planning and controlling of the operations of the firm. Three lecture hours a week for one semester. May not be counted toward the Bachelor of Business Administration degree.

## ACC 311 (TCCN: ACCT 2301). Fundamentals of Financial Accounting.

Restricted to students in the McCombs School of Business. Concepts and their application in transaction analysis and financial statement preparation; analysis of financial statements. Three lecture hours a week for one semester. Accounting 311 and 311H may not both be counted. Offered on the letter-grade basis only. Prerequisite: Twenty-four semester hours of college credit, including Economics 304K.

### ACC 311H. Fundamentals of Financial Accounting: Honors.

Restricted to students admitted to the McCombs School of Business Honors Program. An exploration of concepts and their application in transaction analysis and financial statement preparation; and analysis of financial statements. Three lecture hours a week for one semester. Accounting 311 and 311H may not both be counted. Offered on the letter-grade basis only. Prerequisite: Twenty-four semester hours of college credit including Economics 304K, Management Information Systems 301 or its equivalent, and credit or registration for Business Administration 324H.

## ACC 312 (TCCN: ACCT 2302). Fundamentals of Managerial Accounting.

Restricted to students in the McCombs School of Business. Introduction to cost behavior, budgeting, responsibility accounting, cost control, and product costing. Three lecture hours a week for one semester. Accounting 312 and 312H may not both be counted. Offered on the letter-grade basis only. Prerequisite: Accounting 311 or 311H.

### ACC 312H. Fundamentals of Managerial Accounting: Honors.

Restricted to students admitted to the McCombs School of Business Honors Program. Introduction to cost behavior, budgeting, responsibility accounting, cost control, and product costing. Three lecture hours a week for one semester. Accounting 312 and 312H may not both be counted. Offered on the letter-grade basis only. Prerequisite: Accounting 311H, and Business Administration 151H.

### **Upper-Division Courses**

### ACC 326. Financial Accounting--Intermediate.

Restricted to students in a business major. Theoretical foundation, concepts, and principles underlying financial statements; current assets; current liabilities; property, plant, and equipment; short-term investments; present value analysis. Three lecture hours a week for one semester. Accounting 326 and 380K (Topic 1: Financial Accounting Standards and Analysis I) may not both be counted. Offered on the letter-grade basis only. Prerequisite: Accounting 311 or 311H, and 312 or 312H, with a grade of at least C- in each; and Finance 357 or 357H.

### ACC 327. Financial Statement Analysis.

Restricted to students in a business major. Study of financial statements and their related footnotes; tools and procedures common to financial

statement analysis; the relationships among business transactions, environmental forces (political, economic, and social), and reported financial information; and how financial statement information can help solve certain business problems. Three lecture hours a week for one semester. Accounting 327 and 380K (Topic 7: Financial Statement Analysis) may not both be counted. Prerequisite: Accounting 326 with a grade of at least C-.

### ACC 329. Managerial Accounting and Control.

Restricted to students in a business major. The origination, processing, reporting, and use in business operations of accounting information for management purposes. Three lecture hours a week for one semester. Only one of the following may be counted: Business Administration 382T, Accounting 329, 359, 387 (Topic 1), 287 (Topic 5). Prerequisite: Accounting 311 or 311H, and 312 or 312H, with a grade of at least C- in each.

## ACC 140S, 240S, 340S, 440S, 540S, 640S, 740S, 840S, 940S. Topics in Accounting.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office or the school's BBA Exchange Programs. Credit is recorded as assigned by the study abroad adviser in the Department of Accounting. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. May be repeated for credit when the topics vary.

### ACC 151. Accounting Careers Exploration.

Restricted to students admitted to the integrated approach to the Master in Professional Accounting. Presentations by professional accountants and managers. One and one-half lecture hours a week for one semester. Offered on the letter-grade basis only.

## ACC 152. Master in Professional Accounting Distinguished Speaker Lyceum.

Restricted to students admitted to the integrated approach to the Master in Professional Accounting. Discussion of current issues confronting the accounting profession. The equivalent of one and one-half lecture hours a week for one semester. Offered on the pass/fail basis only.

### ACC 355. Introduction to Taxation.

Restricted to students admitted to the integrated approach to the Master in Professional Accounting. The role of taxes in contemporary society and their impact on individuals and business. Three lecture hours a week for one semester. Only one of the following may be counted: Accounting 355, 364, 380K (Topic 11: Introduction to Taxation). Offered on the lettergrade basis only.

### ACC 356. Financial Accounting Concepts and Research.

Restricted to students admitted to the integrated approach to the Master in Professional Accounting. Conceptual framework of financial accounting; research methods in financial reporting; and financial reporting institutions and regulations. Three lecture hours a week for one semester. Offered on the letter-grade basis only.

### ACC 358C. Auditing and Other Assurance Services.

Restricted to students admitted to the integrated approach to the Master in Professional Accounting. Information quality assurance, auditing, and control, considered from the perspective of a business manager who must decide the type and amount of assurance to acquire. Three lecture hours a week for one semester. Only one of the following may be counted: Accounting 358C, 362, 380K (Topic 4). Offered on the lettergrade basis only. Prerequisite: Accounting 356 or the equivalent.

### ACC 359. Managerial/Cost Accounting.

Restricted to students admitted to the integrated approach to the Master in Professional Accounting. Analysis of manufacturing costs, development of cost estimates, and preparation of relevant information for management decision making. Three lecture hours a week for one semester. Only one of the following may be counted: Accounting 329, 359, 287 (Topic 5), 287 (Topic 1), 387 (Topic 1), 387 (Topic 5), Business Administration 382T. Offered on the letter-grade basis only.

### ACC 362. Auditing and Control.

Restricted to students in a business major. Professional practice standards and procedures of auditing: ethics, legal liability, sampling methods, control systems, control design, and control evaluation. Three lecture hours a week for one semester. Only one of the following may be counted: Accounting 358C, 362, 380K (Topic 4). Prerequisite: Accounting 311 or 311H, and 312 or 312H, with a grade of at least C- in each.

### ACC 364. Fundamentals of Taxation.

Restricted to students in a business major. Introduction to the role of taxes in contemporary society and their impact on individuals and business entities; emphasis on federal income taxation. Three lecture hours a week for one semester. Only one of the following may be counted: Accounting 355, 364, 380K (Topic 11: Introduction to Taxation). Prerequisite: Accounting 311 or 311H, and 312 or 312H, with a grade of at least C- in each.

### ACC 366P. Accounting Practicum.

Restricted to students in a business major. Students apply skills in their major area and focus on additional project management skills through group projects conducted in a professional setting. Students may work with a private or a public enterprise. The equivalent of three lecture hours a week for one semester. Accounting 366P and 384 (Topic: Tax Practicum) may not both be counted. Prerequisite: Forty-five semester hours of college coursework.

### ACC 178, 278, 378. Contemporary Accounting Topics.

Restricted to students in a business major. In-depth study of selected accounting topics. For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: Accounting 311 or 311H, and 312 or 312H, with a grade of at least C- in each; additional prerequisites vary with the topic.

Topic 2: Petroleum Accounting: Principles, Procedures, and Issues.

Restricted to business majors. Exposure to upstream oil and gas operations and reserves, and industry accounting practices. Only one of the following may be counted: Accounting 178 (Topic 2), 278 (Topic 2), 378 (Topic 2), 378 (Topic: Accounting/Tax for Mineral Industry), 180K (Topic 8), 280K (Topic 8), 380K (Topic 8). Offered on the lettergrade basis only.

**Topic 3: Financial Planning for Wealth Management.** Introduction to basic concepts of personal wealth management and financial planning, including insurance and risk management, investment management, tax planning, estate planning, and retirement planning. Designed for upper-level finance and accounting majors interested in a career in financial services or MPA students with interest in this area of the accounting profession. Only one of the following may be counted: Accounting 378 (Topic Financial Planning for Wealth Management), 178 (Topic 3), 278 (Topic 3), 378 (Topic 3), 180K (Topic 24), 280K (Topic 24), 380K (Topic 24), Finance 172 (Topic 3), 272 (Topic 3), 372 (Topic 3), 377 (Topic: Financial Planning for Wealth Management). Offered on the letter-grade basis only. Additional prerequisite: Credit for Finance 357 or 357H; credit or registration for 367 is recommended. **Topic 5: Taxation of Real Estate Investments.** Exposure to accounting practices in the real estate industry. Only one of the following may be counted: Accounting 378 (Topic: Taxation of Real Estate Invest), 178 (Topic 5), 278 (Topic 5), 378 (Topic 5), Real Estate 360 (Topic: Taxation of Real Estate Invest), 360 (Topic 1). Offered on the letter-grade basis only. Additional prerequisite: Upper-division standing.

### ACC 179C, 379C. Independent Research in Accounting.

Restricted to students in the McCombs School of Business. Conference course. Only two of the following may be counted toward the Bachelor of Business Administration: Accounting 179C, 379C, Business, Government, and Society 179, 379, Finance 179C, 379C, International Business 179C, 379C, Legal Environment of Business 179, 379, Management 179C, 379C, Management Information Systems 179, 379, Marketing 179C, 379C, Operations Management 179, 379, Real Estate 179C, 379C, Risk Management 179, 379. Prerequisite: Eighteen semester hours of coursework in business and economics, six of which must be upperdivision; Accounting 311 or 311H, and 312 or 312H, with a grade of at least C- in each; consent of instructor; and written approval on forms provided for that purpose before the first meeting of the course from the department chair's office.

## **Department of Finance**

## Finance: FIN

### **Lower-Division Courses**

### **Upper-Division Courses**

### FIN 320F. Foundations of Finance.

Restricted to non-McCombs School of Business majors. Principles of effective financial management, including planning, organization, and control; financial intermediaries; securities markets; evaluating alternative assets, debt, and capital structures. Three lecture hours a week for one semester. May not be counted toward the Bachelor of Business Administration degree. Prerequisite: Upper-division standing, and one of the following: Accounting 310F; 311 or 311H, and 312 or 312H; or 6 semester hours of accounting coursework.

## FIN 140S, 240S, 340S, 440S, 540S, 640S, 740S, 840S, 940S. Topics in Finance.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. or the school's BBA Exchange Programs. Credit is recorded as assigned by the study abroad adviser in the Department of Finance. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. May be repeated for credit when the topics vary.

### FIN 357. Business Finance.

Restricted to students in a business major. Principles of finance, with application to all aspects of the business firm; particular attention to cost of capital, investment decisions, management of assets, and procurement of funds. Three lecture hours a week for one semester. Finance 357 and 357H may not both be counted. Offered on the lettergrade basis only. Prerequisite: Statistics 309 or 309H, and credit or registration for the following: Accounting 312 or 312H, and Business Administration 324 or 324H.

### FIN 357H. Business Finance: Honors.

Restricted to students admitted to the McCombs School of Business Honors Program. An investigation of the principles of finance, with application to all aspects of the business firm; particular attention to cost of capital, investment decisions, management of assets, and procurement of funds. Three lecture hours a week for one semester. Finance 357 and 357H may not both be counted. Offered on the lettergrade basis only. Prerequisite: Economics 304K and 304L, and credit or registration for Accounting 312H, Business Administration 324H, and Statistics 371H or 375H.

### FIN 165P, 365P. Energy Finance Practicum.

Restricted to students accepted to the Helios Challenge. Students apply skills in the energy industry and focus on additional project management skills through group projects conducted in a professional setting. Students may work with a private or a public enterprise. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May not be used to satisfy the professional, business related internship or practicum course degree requirement for the Bachelor of Business Administration. Prerequisite: Consent of instructor.

### FIN 366P. Finance Practicum.

Restricted to students accepted to the Financial Analyst Program or Real Estate Investment Trust Program. Students apply skills in their major area and focus on additional project management skills through group projects conducted in a professional setting. Students may work with a private or a public enterprise. The equivalent of three lecture hours a week for one semester. Prerequisite: Forty-five semester hours of college coursework and consent of instructor.

### FIN 367. Investment Management.

Restricted to students in a business major. Investment theory, alternatives, and decision making under differing uncertainties and constraints; formulation of objectives and strategies; development of conceptual managerial perspectives and philosophies for investment environments. Three lecture hours a week for one semester. Finance 367 and 367Q may not both be counted. Prerequisite: Finance 357 or 357H; and credit or registration for Statistics 371G, 371H, 375, or 375H.

### FIN 370. Integrative Finance.

Restricted to students in a business major. Integrates financial decision making in functional areas of finance; utilizes various concepts to promulgate strategies, policies, and procedures in managing funds to achieve objectives. Three lecture hours a week for one semester. Finance 370 and 370H may not both be counted. Prerequisite: Senior standing; Finance 357 or 357H, and 367 (or 367Q); credit or registration for one of the following: Accounting 353J, 366P, Business Administration 353, 353H, Finance 353, 366P, Management 347P, 353, 366P, 367P, 369P, Management Information Systems 353, 366P, Marketing 353, 366P, Operations Management 353, or 366P; and three additional semester hours of coursework in finance or real estate.

### FIN 370H. Integrative Finance: Honors.

Restricted to students admitted to the McCombs School of Business Honors Program. Integrates financial decision making in functional areas of finance; utilizes various concepts to promulgate strategies, policies, and procedures in managing funds to achieve objectives. Three lecture hours a week for one semester. Finance 370 and 370H may not both be counted. Offered on the letter-grade basis only. Prerequisite: Senior standing; Finance 357H and 367 (or 367Q); credit or registration for one of the following: Accounting 353J, 366P, Business Administration 353, 353H, Finance 353, 366P, Management 347P, 353, 366P, 367P, 369P, Management Information Systems 353, 366P, Marketing 353, 366P, Operations Management 353, or 366P; and three additional semester hours of coursework in finance or real estate.

### FIN 371M. Money and Capital Markets.

Restricted to students in a business major. Development of modern financial markets, with emphasis on the factors that determine interest rates; institutional characteristics and pricing mechanisms of various interest-sensitive securities. Three lecture hours a week for one semester. Prerequisite: Finance 357 or 357H.

### FIN 172, 272, 372. Advanced Topics in Finance.

Restricted to students in a business major. Advanced topics in finance. For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Credit or registration for Finance 357 or 357H; additional prerequisites may vary with the topic.

**Topic 1: Environmental, Social, and Governance Investing.** A critical assessment of the actions of investors and corporations with regard to environmental, social, and governance policies, including the potential motivations and resulting consequences. Finance 372 (Topic: Environmental, Social, and Governance Investing) and 172 (Topic 1), 272 (Topic 1), 372 (Topic 1) may not both be counted. **Topic 2: Valuation of Energy Investment.** Restricted to business majors. Explores the evaluation and financing of energy investments with a focus on upstream oil and gas projects. Emphasis on developing financial modeling skills, from detailed discounted cash flow models to advanced option pricing models, using various computational approaches. Three lecture hours a week for one semester. Finance 372 (Topic 2), 372 (Topic 2) may not both be counted. Additional prerequisite: Finance 374C.

**Topic 3: Financial Planning for Wealth Management.** Introduction to basic concepts of personal wealth management and financial planning, including insurance and risk management, investment management, tax planning, estate planning and retirement planning. Designed for upper-level finance and accounting majors interested in a career in financial services or students pursuing master in professional accounting with interest in this area of the accounting profession. Only one of the following may be counted: Accounting 378 (Topic: Financial Planning for Wealth Management), 178 (Topic 3), 278 (Topic 3), 378 (Topic 3), 180K (Topic 24), 280K (Topic 24), 380K (Topic 24), Finance 172 (Topic 3), 272 (Topic 3), 372 (Topic 3), 377 (Topic: Financial Planning for Wealth Management). Additional prerequisite: Accounting 311 or 311H, and 312 or 312H, with a grade of at least Cin each; credit for Finance 357 or 357H; credit or registration for 367 is recommended.

Topic 6: Optimization Method in Finance. Explores quantitative methods and techniques in optimization and simulation, and their use in financial decision making. Discusses theory and application in portfolio selection, options and other derivative pricing, index tracking, risk measures, volatility estimating. Specific subjects will include linear, quadratic, nonlinear, and integer programming; dynamic programming; robust optimization; Monte Carlo methods and variance reduction techniques. Emphasis will be placed on problem solving with advanced computational programming languages. Only one of the following may be counted: Finance 372 (Topic: OPTIMIZATION METHOD IN FINANCE), 372 (Topic 6), Statistics 372 (Topic 6). Topic 10: Economic Principles of Managerial Decisions. Using game theory to make sound strategic decisions and gain a competitive advantage. Subjects include strategic pricing, contracting, market entry, and network competition. Finance 372 (Topic: Economic Principles of Managerial Decisions) and 172 (Topic 10), 272 (Topic 10), 372 (Topic 10) may not both be counted.

**Topic 18: Corporate Finance Fellows.** Restricted to students admitted to the Corporate Finance Fellows program. Practicum in the application of finance tools and methods to corporate finance problems. Finance 372 (Topic: Corporate Finance Fellows) and 172, 272, 372 (Topic 18) may not both be counted. Additional prerequisite: Consent of instructor.

### FIN 373. Research Topics in Finance.

Restricted to students in a business major. The equivalent of three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Finance 357 or 357H, and consent of instructor.

**Topic 1: Advanced Studies in International Finance.** Students work in small research groups to write academic papers on topics in international finance and business. Designed to develop critical thinking skills, writing skills, sophisticated use of technology, and experience working across different cultures.

### FIN 374C. Valuation.

Restricted to students in a business major. An in-depth study of theory and practice of corporate financial management in establishing major financial and investment policies; techniques for analysis, evaluation, and control. Three lecture hours a week for one semester. Prerequisite: Finance 357 or 357H.

### FIN 374S. Entrepreneurial Finance.

Restricted to students in a business major. Development, implementation, and control of financial plans, strategies, and policies by owner-managers of small and medium-sized firms; analysis of alternatives and decision making. Three lecture hours a week for one semester. Prerequisite: Finance 357 or 357H.

### FIN 375F. Banking and Financial Intermediation.

Restricted to students in a business major. Theory of financial intermediation, regulatory environment, interest rates, and asset/liability management with a focus on commercial banking; depository and contractual intermediation. Three lecture hours a week for one semester. Prerequisite: Finance 357 or 357H.

### FIN 376. International Finance.

Restricted to students in a business major. The international financial environment, with emphasis on the factors affecting exchange rates and how exchange rate changes affect the firm. Three lecture hours a week for one semester. Prerequisite: Finance 357 or 357H.

### FIN 377. Advanced Investment Analysis.

Second course in investments, with emphasis on quantitative applications and the underlying theory in the analysis and management of securities and portfolios. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Finance 357 or 357H; additional prerequisites vary with the topic.

Topic 1: Portfolio Analysis and Management. Restricted to students in a business major. Additional prerequisite: Finance 367 or 367Q. Topic 2: Financial Risk Management. Restricted to students in a business major. Finance 377 (Topic 2) and 377 (Topic 5: Energy Financial Risk Management) may not both be counted. Additional prerequisite: Finance 367 or 367Q.

**Topic 3: Security Analysis.** Restricted to students accepted to the Financial Analyst Program. Finance 377 (Topic 3) and 377 (Topic 4: Financial Analysis) may not both be counted. Additional prerequisite: Credit or registration for Finance 367 or 367Q, and consent of instructor.

**Topic 4: Financial Analysis.** Restricted to students in a business major. Application of fundamental analysis and valuation techniques. Finance 377 (Topic 3: Security Analysis) and 377 (Topic 4) may not both be counted. Additional prerequisite: Credit or registration for Finance 367 or 367Q.

**Topic 5: Energy Financial Risk Management.** Restricted to students in a business major. Finance 377 (Topic 2: Financial Risk Management)

and 377 (Topic 5) may not both be counted. Additional prerequisite: Finance 367 or 367Q.

### FIN 377L. Portfolio Analysis and Management.

Restricted to students in a business major. An exploration of quantitative applications and the underlying theory in the analysis and management of securities and portfolios; designed for students with career goals in investment. Three lecture hours a week for one semester. Prerequisite: Finance 367 or 367Q.

### FIN 179C, 379C. Independent Research in Finance.

Restricted to students in a business major. Conference course. Only two of the following may be counted toward the Bachelor of Business Administration: Accounting 179C, 379C, Business, Government, and Society 179, 379, Finance 179C, 379C, International Business 179C, 379C, Legal Environment of Business 179, 379, Management 179C, 379C, Management Information Systems 179, 379, Marketing 179C, 379C, Operations Management 179, 379, Real Estate 179C, 379C, Risk Management 179, 379. Prerequisite: Eighteen semester hours of coursework in business and economics, six of which must be upperdivision; Finance 357 or 357H with a grade of at least C-; and consent of instructor. A student registering for this course must obtain written approval from the department chair's office, on forms provided for that purpose, before the first meeting of the course.

### Real Estate: R E

### **Lower-Division Courses**

### **Upper-Division Courses**

### R E 140S, 240S, 340S, 440S, 540S, 640S, 740S, 840S, 940S. Topics in Real Estate.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office or the school's BBA Exchange Programs. Credit is recorded as assigned by the study abroad adviser in the Department of Finance. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. May be repeated for credit when the topics vary.

## R E 358. Introduction to Real Estate and Urban Land Development.

Same as Urban Studies 351 (Topic 5). An examination of the principles of real estate and urban land economics. Subjects include investment, valuation, financing, and public policy in real estate and mortgage markets. Three lecture hours a week for one semester. Only one of the following may be counted: Real Estate 358, Urban Studies 351 (Topic: Introduction to Real Estate and Urban Land Development), 351 (Topic 5). Prerequisite: Accounting 310F or 311 or 311H; and Finance 357 or 357H.

### R E 160, 260, 360. Special Topics in Real Estate.

Restricted to students in a business major. For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: Real Estate 358.

**Topic 1: Taxation of Real Estate Investments.** Exposure to accounting practices in the real estate industry. Only one of the following may be counted: Accounting 378 (Topic: Taxation of Real Estate Invest), 178 (Topic 5), 278 (Topic 5), 378 (Topic 5), Real Estate 360 (Topic: Taxation of Real Estate Invest), 360 (Topic 1). Offered on the letter-grade basis only.

### R E 364. Real Estate Development.

Provides an interdisciplinary experience with the entire development process including finance, branding, architecture, planning, entitlements,

engineering, among others; and an opportunity to work with a multidisciplinary team on real-world commercial real estate projects. Includes various guest speakers from the development industry that represent different aspects and phases of the development process. Additionally, time is provided for project work sessions with teammates, faculty and professional mentors which will include progress reports, workshops and group presentations. Culminates in a presentation of each group's work, including branding, business plan and pro-forma along with site diagrams. The equivalent of three lecture hours a week for one semester Real Estate 360 (Topic: Real Estate Development) and 364 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Real Estate 358 and consent of instructor.

### R E 376G. Real Estate Investment.

Study of the setting and measurement of property values in real estate markets and an analysis of real estate assets as investments. Three lecture hours a week for one semester. Prerequisite: Real Estate 358.

### R E 378K. Real Estate Finance and Syndication.

An examination of debt and equity financing of residential and commercial properties; mortgage markets and instruments; lender and investor decisions in real estate financing. Three lecture hours a week for one semester. Prerequisite: Finance 367 or Real Estate 358.

## Department of Business, Government and Society

### **Business, Government, and Society: BGS**

### **Lower-Division Courses**

### **Upper-Division Courses**

### BGS 325. Social and Ethical Responsibility of Business.

Restricted to students in a business major. Examines ethical aspects of the decision-making processes of managers and employees. Also explores responsibility of firms to society and other constituencies. Three lecture hours a week for one semester.

### BGS 140S, 240S, 340S, 440S, 540S, 640S, 740S, 840S, 940S. Topics in Business, Government, and Society.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office, or the school's BBA Exchange Programs. Credit is recorded as assigned by the study abroad adviser in the Department of Business, Government, and Society. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. May be repeated for credit when the topics vary.

## BGS 170, 270, 370. Topics in Business, Government, and Society.

For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Energy Technology and Policy.** Designed to give students an understanding of the broad context of energy production and consumption in the U.S. and the world. Discusses past energy trends and fundamentals of energy and power, including fossil fuels and renewable energy sources and technologies. Explores different energy resources, environmental impacts, and societal uses of energy, and concludes with an evaluation of future energy technology options. Additional prerequisite: Upper-division standing.

**Topic 2: Ethics, CSR, and Service Learning.** Examines reasons that seemingly good people sometimes make unethical choices. Explores real-life ethical dilemmas, our decision-making processes, and

ideal behavior for the future. An Academic Service Learning course, partnering with corporations (like Google, Inc.), the City of Austin, local non-profits, and other local universities to engage in service projects. For each semester hour of credit earned, one lecture hour a week for one semester. Business, Government, and Society 370.2 and 370 (Topic: Ethics, CSR, & Service Learning) may not both be counted. Additional prerequisite: Upper-division standing.

#### Topic 3: Business Ethics and Corporate Social Responsibility.

Focuses on the development of ethical leadership and responsibility. Learn about basic concepts relevant to business ethics, develop ethical principles in a variety of business domains, and practice discussing ethical issues with people from a variety of viewpoints and backgrounds. Business, Government, and Society 370 (Topic: BUSN ETHICS & SOCL RESPONSBLTY) and 370 (Topic 3) may not both be counted.

**Topic 10: Nontechnical Exploration and Production.** Restricted enrollment; contact the Energy Management and Innovation Center for permission to register. Introduction to the oil and gas exploration and production business for nontechnical personnel. Subjects include prospect generation and leasing, drilling, production, processing, transportation, and closing out a project. Business Government and Society 370 (Topic: Oil and Gas Exploration for Nontechnical Personnel) and 170 (Topic 10), 270 (Topic 10), 370 (Topic 10) may not both be counted. Additional prerequisite: Sophomore standing.

### BGS 371. Corporate Political Strategy.

A study of how the political and regulatory environment enables and constrains business activity and how individual firms and groups of firms can ethically yet effectively lobby legislatures, negotiate with regulators, create industry associations, make campaign contributions, and engage in other political activity to gain competitive advantage. Three lectures hours a week for one semester. Only one of the following may be counted: Business, Government, and Society 371, Marketing 372 (Topic: Corporate Political Strategy), 372 (Topic 15). Offered on the lettergrade basis only. Prerequisite: Upper-division standing.

### BGS 372. Strategic Corporate Social Responsibility.

A study of how corporations can engage in corporate social responsibility and sustainable activities to improve the world with strategic considerations kept in mind. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upperdivision standing.

### BGS 373. Strategic Corporate Communication.

Studies corporate efforts to inform, motivate, and persuade various constituencies, including investors, employees, communities, and regulators. Subjects include public relations, investor relations, and government relations. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upper-division standing.

### BGS 374. Global Political Economy.

Exploration of how firms can successfully integrate their traditional strategies with non-market strategy in the global arena, including how to successfully engage with international non-market actors such as foreign governments, regulators, political parties, NGOs, and the media. Examines the necessary tools to craft successful, integrated firm strategies in diverse institutional and political environments. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upper-division standing.

## BGS 179, 379. Independent Research in Business, Government, and Society.

Conference course. Only two of the following may be counted toward the Bachelor of Business Administration: Accounting 179C, 379C,

Business, Government, and Society 179, 379, Finance 179C, 379C, International Business 179C, 379C, Legal Environment of Business 179, 379, Management 179C, 379C, Management Information Systems 179, 379, Marketing 179C, 379C, Operations Management 179, 379, Real Estate 179C, 379C, Risk Management 179, 379. Prerequisite: Sophomore standing, consent of instructor, and written approval from the department chair's office, before the first meeting of the course, on forms available in the department office for that purpose.

### Legal Environment of Business: LEB

### **Lower-Division Courses**

### **Upper-Division Courses**

### LEB 320F. Foundations of Business Law and Ethics.

Restricted to non-McCombs School of Business majors. Not open to law students. Introduction to the legal problems confronting businesses in the global environment. Three lecture hours a week for one semester. Legal Environment of Business 320F and 323 may not both be counted. May not be counted toward the Bachelor of Business Administration degree. Prerequisite: Upper-division standing.

### LEB 323. Business Law and Ethics.

Restricted to students in a business major. An investigation of the role of law in society; introduction to legal reasoning, dispute resolution, judicial process, constitutional law, agency, torts, government regulations; business ethics; study of contracts. Three lecture hours a week for one semester. Legal Environment of Business 323 and 323H may not both be counted. Offered on the letter-grade basis only.

### LEB 323H. Business Law and Ethics: Honors.

Restricted to students admitted to the McCombs School of Business Honors Program. An investigation of the role of law in society; introduction to legal reasoning, dispute resolution, judicial process, constitutional law, agency, torts, government regulations; business ethics; study of contracts. Three lecture hours a week for one semester. Legal Environment of Business 323 and 323H may not both be counted. Offered on the letter-grade basis only. Prerequisite: Senior standing, Accounting 312H, and credit or registration for Business Administration 324H.

### LEB 334M. Healthcare Law and Policy.

Introduces the legal and political environment in which the U.S. health care system operates. Three lecture hours a week for one semester. Legal Environment of Business 334M and 370 (Topic: Healthcare Law and Policy) may not both be counted. Offered on the letter-grade basis only. Prerequisite: Upper-division standing.

### LEB 140S, 240S, 340S, 440S, 540S, 640S, 740S, 840S, 940S. Topics in the Legal Environment of Business.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office or by the school's BBA Exchange Programs. Credit is recorded as assigned by the study abroad adviser in the Department of Business, Government, and Society. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. May be repeated for credit when the topics vary.

### LEB 361. Law of Business Organizations.

Restricted to students in a business major. Study of basic legal principles of business organizations and operations, including practical comparison and assessment of advantages and disadvantages of different types of organization. Three lecture hours a week for one semester. Prerequisite: Thirty semester hours of undergraduate coursework, or consent of instructor.

### LEB 363. Real Estate Law.

An examination of law pertaining to estates and interests in land, conveyances and mortgages, brokers, easements, contracts, default and foreclosure. Three lecture hours a week for one semester. Legal Environment of Business 363 and 170 (Topic 13), 270 (Topic 13), 370 (Topic 13) may not both be counted. Prerequisite: Thirty semester hours of undergraduate coursework, or consent of instructor.

### LEB 366. Commercial Transactions.

Restricted to students in a business major. Applied business transactions, with emphasis on the Uniform Commercial Code; emphasis on bailments, sales of goods, commercial paper, bank-customer relationships, creditor security devices, and bankruptcy. Three lecture hours a week for one semester. Prerequisite: Thirty semester hours of undergraduate coursework, or consent of instructor.

## LEB 170, 270, 370. Topics in the Legal Environment of Business.

Selected topics on legal constraints affecting managerial decision making and business behavior. For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Thirty semester hours of undergraduate coursework; additional prerequisites vary with the topic.

Topic 1: Antitrust Law. Topic 2: Environmental Law. Topic 3: Employer-Employee Relations. Topic 4: Social and Ethical Responsibilities of Business. Topic 5: The Law and the Multinational Corporation. Topic 6: Law of the Entertainment Business. Topic 7: Business Torts. Topic 8: Constitutional Issues in Business. Topic 9: Business Dispute Resolution. Topic 10: Intellectual Property. Topic 11: Sports, Sports Management, and Entertainment Law. Survey of the law as it relates to amateur and professional sports and sporte menagement, landudes an entertainment law component that

sports management. Includes an entertainment law component that examines the legal aspects of the film industry. **Topic 12: Law of the European Union.** Introduction to the rapidly

evolving law of the European Union, with particular emphasis on business applications and comparisons to American law.

**Topic 13: Contracts and Real Property.** Restricted enrollment; contact the Energy Management and Innovation Center for permission to register. General real property interests, including land, mineral, and riparian interests. Subjects include duty of landowners; nonpossessory interest in real property; fixtures; liens; co-ownership of real property; the real estate contract; the broker's listing agreements; deeds; and mortgages. Legal Environment of Business 363 and 170 (Topic 13), 270 (Topic 13), 370 (Topic 13) may not both be counted.

**Topic 14: Oil and Gas Law.** Restricted enrollment; contact the Energy Management and Innovation Center for permission to register. Ownership interests in the oil and gas mineral estate. Subjects include conveyance and partition of the mineral estate; trespass and third party claims; and oil and gas lease provisions. Legal Environment of Business 170 (Topic 14), 270 (Topic 14), 370 (Topic 14) and 372 may not both be counted. Additional prerequisite: For non-energy management or non-public policy program students, consent of instructor.

## LEB 179, 379. Independent Research in the Legal Environment of Business.

Restricted to students in a business major. Conference course. Only two of the following may be counted toward the Bachelor of Business Administration: Accounting 179C, 379C, Business Government and Society 179, 379, Finance 179C, 379C, International Business 179C, 379C, Legal Environment of Business 179, 379, Management 179C, 379C, Management Information Systems 179, 379, Marketing 179C, 379C, Operations Management 179, 379, Real Estate 179C, 379C, Risk Management 179, 379. Prerequisite: Eighteen semester hours of coursework in business and economics, six of which must be upperdivision; Legal Environment of Business 323 or 323H with a grade of at least C-; consent of instructor; and written approval before the first meeting of the course from the department chair's office, on forms provided for that purpose.

## Department of Information, Risk, and Operations Management

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

### **Management Information Systems: MIS**

### **Lower-Division Courses**

## MIS 301. Introduction to Information Technology Management.

Restricted to students in the McCombs School of Business. Explores how information technology helps to achieve competitive advantage and improve decision making, business processes, operations, and organizational design. Uses a cross-functional perspective to recognize the role of technology across business activities of management, finance, marketing, human resources, and operations. Three lecture hours a week for one semester. Management Information Systems 301 and 301H may not both be counted. Offered on the letter-grade basis only.

### MIS 301H. Introduction to Information Technology Management: Honors.

Restricted to students admitted to the McCombs School of Business Honors Program. Explores how information technology helps to achieve competitive advantage and improve decision making, business processes, operations, and organizational design. Uses a crossfunctional perspective to recognize the role of technology across business activities of management, finance, marketing, human resources, and operations. Three lecture hours a week for one semester. Management Information Systems 301 and 301H may not both be counted. Offered on the letter-grade basis only.

### MIS 302F. Foundations of Information Technology Management.

Restricted to students in a non-McCombs School of Business major. Explores how information technology helps to achieve competitive advantage and improve decision making, business processes, operations, and organizational design. Uses a cross-functional perspective to recognize the role of technology across business activities of management, finance, marketing, human resources, and operations. Three lecture hours a week for one semester. Management Information Systems 301 and 302F may not both be counted. May not be counted toward the Bachelor of Business Administration degree.

### MIS 304. Introduction to Problem Solving and Programming.

Restricted to students in the McCombs School of Business. Programming skills for creating easy-to-maintain systems for business applications. Object-oriented and structured methodologies with Visual Basic. Three lecture hours a week for one semester. Offered on the lettergrade basis only.

## MIS 310 (TCCN: BCIS 1305). Introduction to Management Information Systems.

Basic computer terminology, hardware and software, communications technology, graphics, systems analysis and design, and issues arising out of the rapidly evolving field of information systems. Students are expected to achieve a working knowledge of personal computer software, including operating system software and environments, as well as spreadsheets, analytical graphics, databases, and presentation software. Hands-on experience with the Internet and use of electronic mail. Three lecture hours a week for one semester.

### **Upper-Division Courses**

### MIS 325. Database Management.

Restricted to students in the McCombs School of Business. Beginning and intermediate topics in data modeling for relational database management systems. Three lecture hours a week for one semester. Offered on the letter-grade basis only.

### MIS 333K. Web Application Development.

Restricted to students in a business major. Concepts and practices of information systems. Advanced programming techniques used to generate menu-driven applications. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Management Information Systems 304 and 325 with a grade of at least C- in each.

### MIS 140S, 240S, 340S, 440S, 540S, 640S, 740S, 840S, 940S. Topics in Management Information Systems.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office or the school's BBA Exchange Programs. Credit is recorded as assigned by the study abroad adviser in the Department of Information, Risk, and Operations Management. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. May be repeated for credit when the topics vary.

### MIS 366P. Management Information Systems Practicum.

Restricted to students in a business major. Students apply skills in their major area and focus on additional project management skills through group projects conducted in a professional setting. Students may work with a private or a public enterprise. The equivalent of three lecture hours a week for one semester. Prerequisite: Forty-five semester hours of college coursework and consent of instructor.

## MIS 173, 273, 373. Topics in Management Information Systems.

Restricted to students in a business major. Provides in-depth treatment of business data processing concerns such as database management, telecommunications, and development of commercial systems. For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: Varies with the topic.

Topic 6: Advanced Application of Software Development. Offered on the letter-grade basis only. Additional prerequisite: Management Information Systems 333K and consent of instructor. Topic 8: Advanced Data Communication Systems. Development issues for intranet- and internet-based systems. Offered on the lettergrade basis only. Additional prerequisite: Management Information Systems 173, 273, 373 (Topic 24)(or Management Information Systems 365). Topic 9: Health Care Management. Offered on the letter-grade basis only. Additional prerequisite: Management Information Systems 325. Topic 11: Advanced Analytics Programming. Focuses hands-on data analysis using the Python programming language. Subjects include machine learning tasks such as classification and clustering. Management Information Systems 373 (Topic: Advanced Analytics Programming) and 173, 273, 373 (Topic 11) may not both be counted. Offered on the letter-grade basis only. Additional prerequisite: Management Information Systems 304 with a grade of at least C-. Topic 12: Technical Consulting. Offered on the letter-grade basis only.

Additional prerequisite: Management Information Systems 304 and consent of instructor. **Topic 13: Information Technology for Supply Chains.** Same as

Operations Management 137 (Topic 4). Same as Operations Management 237 (Topic 4). Same as Operations Management 237 (Topic 4). Same as Operations Management 337 (Topic 4). Provides an understanding of how information technology is used to coordinate supply chain activities across different industries. Students work in teams and undertake hands-on exercises to learn how to plan and coordinate operations. Management Information Systems 173, 273, 373 (Topic 13) and Operations Management 137, 237, 337 (Topic 4) may not both be counted. Offered on the lettergrade basis only. Additional prerequisite: Management Information Systems 301 or 301H with a grade of at least C-.

Topic 14: Web Systems Development. Concepts underlying Web development tools, page and site design, and building Web-based business sites. Offered on the letter-grade basis only. Additional prerequisite: Management Information Systems 304 and 325. Topic 15: Systems Analysis for E-Business. Applications of technology for creating e-business systems and process redesign. Offered on the letter-grade basis only. Additional prerequisite: Management Information Systems 325.

**Topic 16: Information Technology Security, Privacy, and Survivability.** Offered on the letter-grade basis only. Additional prerequisite: For business majors, Management Information Systems 333K or the equivalent; for others, consent of instructor.

**Topic 17: Predictive Analytics and Data Mining.** Introduces the data mining process and primary data mining techniques employed to extract intelligence from data and evaluates the strengths and weaknesses of data mining techniques applied to challenges in various business domains. Only one of the following may be counted: Management Information Systems 373 (Topic 17), Marketing 372 (Topic: Predictive Analytics and Data Mining), 372 (Topic 22). Offered on the letter-grade basis only. Additional prerequisite: Statistics 309 or 309H.

**Topic 18: Business Process Excellence.** Provides in-depth coverage of business process change and management with information technology (IT) in today's organizations. Offered on the letter-grade basis only. Additional prerequisite: Upper-division standing. **Topic 19: Enterprise Computing.** Offered on the letter-grade basis only. Additional prerequisite: Management Information Systems 333K, or equivalent programming experience.

**Topic 20: Managing the Future.** Addresses the management of uncertainty. Introduces managerial concepts and methods for structuring decisions about the uncertainties in the future of industries, products, markets, and technologies. Includes scenario analysis, technology roadmaps, and dynamic innovation models. Students work in teams and undertake hands-on exercises aimed at developing a set of alternative futures for industries and technologies. Offered on the letter-grade basis only. Additional prerequisite: Upper-division standing.

Topic 21: Open Innovation. Offered on the letter-grade basis only. Topic 22: IT Audit and Security. Offered on the letter-grade basis only. Topic 23: Social Media Analytics. Introduction to social network analysis for business value using statistical optimization and decision theory; and foundation for analyzing online search and conversation data for market sensing, sentiments, product quality, reputation, recommendations, and brand awareness. Offered on the letter-grade basis only.

**Topic 24: Mobile Apps and Web Services.** An overview of mobile and web services technology models and architectures. Only one of the following may be counted: Management Information Systems 365, 373 (Topic: Mobile Apps & Web Services), 173, 273, 373 (Topic 24). Offered on the letter-grade basis only. Additional prerequisite: Management Information Systems 333K.

**Topic 25: User Generated Content Analytics.** Designed to showcase the virtually unlimited opportunities that exist today to leverage the power of user generated content analytics. Focuses on a gamut of questions ranging from strategic to operational matters pertaining to a firm's social media initiatives, metrics to capture relevant outcomes, and predictive analysis to link social media chatter to business performance. Management Information Systems 373 (Topic: User Generated Content Analytics) and 173, 273, 373 (Topic 25) may not both be counted. Offered on the letter-grade basis only.

### MIS 374. Business System Development.

Restricted to students in a business major. Provides foundation in business system analysis, project management, planning, design, and implementation using basic business knowledge and computer skills. Three lecture hours a week for one semester. Offered on the lettergrade basis only. Prerequisite: Seventy-five semester hours of college coursework, including Management Information Systems 333K.

### MIS 375. Strategic Information Technology Management.

Restricted to students in a business major. Designed to develop an understanding and appreciation for the role of information technology in the context of a firm's strategy. Explores the impact of information technology on the economy and business performance, the emergence of electronic business applications and organizational and market transformation, and the nature of technology-driven business models and strategies. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upper-division standing.

## MIS 179, 379. Independent Research in Management Information Systems.

Restricted to students in a business major. Conference course. Only two of the following may be counted toward the Bachelor of Business Administration: Accounting 179C, 379C, Business, Government, and Society 179, 379, Finance 179C, 379C, International Business 179C, 379C, Legal Environment of Business 179, 379, Management 179C, 379C, Management Information Systems 179, 379, Marketing 179C, 379C, Operations Management 179, 379, Real Estate 179C, 379C Risk Management 179, 379. Prerequisite: Eighteen hours of coursework in business and economics, six of which must be upper-division; Management Information Systems 304 and 325 with a grade of at least B- in each, and consent of instructor; and written approval before the first meeting of the course from the department chair's office, on forms provided for that purpose.

### Operations Management: O M Lower-Division Courses Upper-Division Courses

### O M 334M. Healthcare Operations Management.

Overview of healthcare operations management. Focus on process diagramming, vocabulary, and analysis of effects of variability on healthcare operations in terms of increasing waiting lines, inventory, and patient safety issues. Focus on modern process improvement methodologies. Three lecture hours a week for one semester. Only one of the following may be counted: Operations Management 334M, 335, 335H, and 337 (Topic: Healthcare Operations). Offered on the lettergrade basis only. Prerequisite: Upper division standing, and credit or registration for one of the following: Economics 329, Educational Psychology 371, Mathematics 316, 358K, Statistics 309, 309H, Statistics and Data Sciences 302, 304, 306, 328M.

### O M 335. Operations Management.

Restricted to business majors. The operations or production function and the skills required for analyzing and solving related problems. Three lecture hours a week for one semester. Only one of the following may be counted: Operations Management 334M, 335, 335H. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Business Administration 324 or 324H and credit or registration for Statistics 309 or 309H.

### O M 335H. Operations Management: Honors.

Restricted to students admitted to the McCombs School of Business Honors Program. An investigation of the operations or production function, and the skills required for analyzing and solving related problems. Three lecture hours a week for one semester. Only one of the following may be counted: Operations Management 334M, 335, 335H. Offered on the letter-grade basis only. Prerequisite: Business Administration 324H, Economics 304K and 304L, and Statistics 309 or 309H.

## O M 137, 237, 337. Special Topics in Operations Management.

Restricted to students in a business major. Analysis of contemporary management problems. For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: Varies with the topic.

**Topic 1: Total Quality Management.** Three lecture hours a week for one semester. Offered on the letter-grade basis only. Additional prerequisite: For business majors, Operations Management 334M, 335 or 335H with a grade of at least C-; for others, admission to an appropriate major sequence in engineering.

**Topic 3: Procurement and Supplier Management.** Strategic issues in procurement and supplier management; review of competitive analysis and benchmarking; the purchasing role in fulfilling a firm's operational and competitive strategies; supplier evaluation, development, and relationship management; negotiating with suppliers for results; and commodity planning. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Additional prerequisite: Operations Management 334M, 335 or 335H with a grade of at least C-.

**Topic 4: Information Technology for Supply Chains.** Same as Management Information Systems 173 (Topic 13). Same as Management Information Systems 273 (Topic 13). Same as Management Information Systems 373 (Topic 13). Provides an understanding of how information technology is used to coordinate supply chain activities across different industries. Students work in teams and undertake hands-on exercises to learn how to plan and coordinate operations. Management Information Systems 173, 273, 373 (Topic 13) and Operations Management 137, 237, 337 (Topic 4) may not both be counted. Offered on the letter-grade basis only. Additional prerequisite: Management Information Systems 301 or 301H with a grade of at least C-.

**Topic 5: Project Management.** Offered on the letter-grade basis only. Additional prerequisite: Seventy-five semester hours of coursework, including Operations Management 334M, 335 or 335H with a grade of at least C-.

**Topic 6: Supply Chain Analytics.** Study of dynamic demand forecasting models based on both, data aggregation as well as based

on the hierarchical aggregation of point-of-sale predictive analytics. Learn to use the developed predictive dynamic models for operations planning and operations decision making. Operations Management 337 (Topic: Supply Chain Analytics) and 137, 237, 337 (Topic 6) may not both be counted. Offered on the letter-grade basis only. Additional prerequisite: Credit or registration for Operations Management 334M, 335, or 335H.

**Topic 7: New Product Development.** The integration of supply chain management into the product design and development process. Focuses on skills and knowledge involving product development and incorporating supply chain considerations. Emphasis on designing products that optimize the supply chain while maintaining the products vision from concept to customer Operations Management 337 (Topic: PRODUCT DEVELOPMENT) and 137, 237, 337 (Topic 7) may not both be counted. Offered on the letter-grade basis only. Additional prerequisite: Operations Management 334M, 335 or 335H with a grade of at least C-.

### O M 338. Supply Chain Modeling and Optimization.

Restricted to business majors. Framing, formulating, and applying quantitative optimization and descriptive models to support supply chain and operations management decisions, using spreadsheets and other software. Requires familiarity with spreadsheets. Three lecture hours a week for one semester. Operations Management 337 (Topic 2) and 338 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Operations Management 334M, 335 or 335H.

### O M 140S, 240S, 340S, 440S, 540S, 640S, 740S, 840S, 940S. Topics in Operations Management.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office or the school's BBA Exchange Programs. Credit is recorded as assigned by the study abroad adviser in the Department of Information, Risk, and Operations Management. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. May be repeated for credit when the topics vary.

### O M 366P. Operations Management Practicum.

Restricted to business majors. Students apply skills in their major area and focus on additional project management skills through group projects conducted in a professional setting. Students may work with a private or a public enterprise. The equivalent of three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Completion of at least forty-five semester hours of college coursework, and credit or registration for Operations Management 334M, 335 or 335H.

### O M 367. Strategic Supply Chain Management.

Restricted to students in a business major. Management of manufacturing process technology in international competition. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Operations Management 334M or 335 or 335H with a grade of at least C-; and 338.

### O M 368. Logistics and Inventory Management.

Restricted to students in a business major. Analysis of the entire flow of information, materials, and services from suppliers through factories and warehouses to the end customer. Includes logistics, supplier selection, and inventory management, using case studies, optimization, and simulation. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Operations Management 334M or 335 or 335H, with a grade of at least C-; and credit or registration for 338.

## O M 179, 379. Independent Research in Operations Management.

Restricted to students in a business major. Conference course. Only two of the following may be counted toward the Bachelor of Business Administration: Accounting 179C, 379C, Business, Government, and Society 179, 379, Finance 179C, 379C, International Business 179C, 379C, Legal Environment of Business 179, 379, Management 179C, 379C, Management Information Systems 179, 379, Marketing 179C, 379C, Operations Management 179, 379, Real Estate 179C, 379C, Risk Management 179, 379. Prerequisite: Eighteen semester hours of coursework in business and economics, six of which must be upperdivision; Management 336 or 336H, Operations Management 334M or 335 or 335H with a grade of at least C-; consent of instructor; and written approval before the first meeting of the course from the department chair's office on forms available for that purpose.

### **Risk Management: R M**

### **Lower-Division Courses**

### **Upper-Division Courses**

### R M 140S, 240S, 340S, 440S, 540S, 640S, 740S, 840S, 940S. Topics in Risk Management.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office or the school's BBA Exchange Programs. Credit is recorded as assigned by the study abroad adviser in the Department of Information, Risk, and Operations Management. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. May be repeated for credit when the topics vary.

### R M 357E. Introduction to Risk Management.

Same as Urban Studies 351 (Topic 6). Principles of risk management for individuals and organizations, financial aspects of insurance companies and markets, industry structure, managerial aspects of underwriting and pricing, and public policy issues. Three lecture hours a week for one semester. Only one of the following may be counted: Risk Management 357E, Urban Studies 351 (Topic: Intro to Risk Management), 351 (Topic 6).

### R M 369K. Managing Employee Risks and Benefits.

Risk management issues involving financial consequences of life and health contingencies, health care finance, company management, pension planning, economics of industry structure, and public policy issues. Three lecture hours a week for one semester.

### R M 376. Quantitative Methods in Finance.

Explores quantitative methods and techniques in optimization and simulation, and their use in financial decision making. Discusses theory and application in portfolio selection, options and other derivative pricing, index tracking, risk measures, volatility estimating. Specific topics will include linear, quadratic, nonlinear, and integer programming; dynamic programming; robust optimization; Monte Carlo methods and variance reduction techniques. Emphasis will be placed on problem solving with advanced computational programming languages. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

### R M 377. Property-Liability Risk Management and Planning.

Analysis of property-liability risks of businesses, risk management tools, risk financing, and insurance contracts for financial planning purposes; investment and underwriting operations, market structures, and insurance regulation. Three lecture hours a week for one semester.

### R M 179, 379. Independent Research in Risk Management.

Restricted to students in a business major. Conference course. Only two of the following may be counted toward the Bachelor of Business Administration: Accounting 179C, 379C, Business Government and Society 179, 379, Finance 179C, 379C, International Business 179C, 379C, Legal Environment of Business 179, 379, Management 179C, 379C, Management Information Systems 179, 379, Marketing 179C, 379C, Operations Management 179, 379, Real Estate 179C, 379C, Risk Management 179, 379. Prerequisite: Eighteen semester hours of coursework in business and economics, including Risk Management 357E; consent of instructor; written approval before the first meeting of the course from the department chair's office, on forms provided for that purpose.

## Statistics: STA

### Lower-Division Courses

### STA 309. Elementary Business Statistics.

Restricted to students in the McCombs School of Business. Training in the use of data to gain insight into business problems; describing distributions (center, spread, change, and relationships), producing data (experiments and sampling), probability and inference (means, proportions, differences, regression and correlation). Three lecture hours a week for one semester. Only one of the following may be counted: Economics 329, Statistics 309, 309H. Only one of the following may be counted: Educational Psychology 371, Mathematics 316, Statistics 309 or Statistics and Data Sciences 301. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Mathematics 408D, 408L, or 408S.

### STA 309H. Elementary Business Statistics: Honors.

Restricted to students admitted to the McCombs School of Business Honors Program. Training in the use of data to gain insight into business problems; describing distributions (center, spread, change, and relationships), producing data (experiments and sampling), probability and inference (means, proportions, differences, regression and correlation). Three lecture hours a week for one semester. Only one of the following may be counted: Economics 329, Statistics 309, 309H. Offered on the letter-grade basis only. Prerequisite: Twenty-four semester hours of college credit, including Mathematics 408D, 408L, or 408S.

### **Upper-Division Courses**

### STA 140S, 240S, 340S, 440S, 540S, 640S, 740S, 840S, 940S. Topics in Statistics.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office or the school's BBA Exchange Programs. Credit is recorded as assigned by the study abroad adviser in the Department of Information, Risk, and Operations Management. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. May be repeated for credit when the topics vary.

### STA 371G. Statistics and Modeling.

Restricted to students in a business major. Focuses on methods used to model and analyze data. Explores multiple regression models and their application in the functional areas of business, time-series models, decision analysis and the value of information, and simulation-based methods. Three lecture hours a week for one semester. Only one of the following may be counted: Statistics 371G, 371H, 375, 375H. Offered on the letter-grade basis only. Prerequisite: Management Information Systems 301, 301H, or 310; Statistics 309 or 309H; and credit or registration for Business Administration 324 or 324H.

### STA 371H. Statistics and Modeling: Honors.

Restricted to students admitted to the McCombs School of Business Honors Program. Focuses on methods used to model and analyze data. Explores multiple regression models and their application in the functional areas of business, time-series models, decision analysis and the value of information, and simulation-based methods. Three lecture hours a week for one semester. Only one of the following may be counted: Statistics 371G, 371H, 375, 375H. Offered on the letter-grade basis only. Prerequisite: Management Information Systems 301, 301H, or 310; Mathematics 408D, 408L, 408M or 408S; Statistics 309 or 309H; and credit or registration for Business Administration 324H.

### STA 172, 272, 372. Topics in Statistics.

Restricted to students in the McCombs School of Business. For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing, and Statistics 309 or 309H with a grade of at least C-; additional prerequisites vary with the topic.

- Topic 1: Statistical Computer Packages.
- Topic 2: Sampling.
- Topic 3: Statistical Decision Making for Business.
- Topic 4: Multivariate Statistical Analysis.

**Topic 5: Financial and Econometric Time Series Modeling.** Applied skills course that focuses on statistical forecasting methods used in business. Subjects may include Box-Jenkins models; exponential smoothing models; ARCH/GARCH models for varying volatility in financial returns; seasonal adjustment of time series; tests for nonstationarity of time series; and modeling multiple time series. Each subject is illustrated with real data using series such as interest rates and stock returns. Additional prerequisite: Statistics 371G, 371H, 375, or 375H; or Statistics and Data Sciences 358 (or Statistics and Scientific Computation 358) or Economics 341K; or other course with basic knowledge about regression.

Topic 6: Optimization Methods in Finance. Explores quantitative methods and techniques in optimization and simulation, and their use in financial decision making. Discusses theory and application in portfolio selection, options and other derivative pricing, index tracking, risk measures, volatility estimating. Specific subjects will include linear, guadratic, nonlinear, and integer programming; dynamic programming; robust optimization; Monte Carlo methods and variance reduction techniques. Emphasis will be placed on problem solving with advanced computational programming languages. Only one of the following may be counted: Finance 372 (Topic: OPTIMIZATION METHOD IN FINANCE), 372 (Topic 6), Statistics 372 (Topic 6). Additional prerequisite: Statistics 371G, 371H, 375, or 375H. Topic 7: Computational Finance. A systematic introduction to the analysis and implementation of numerical methods used in finance. Covers numerical techniques used in derivative pricing and optimal asset allocation, such as Monte Carlo and guasi-Monte Carlo simulation, methods for solving partial differential equations, and dynamic programming.

**Topic 8: Time Series Forecasting Models.** An applied skills approach to statistical forecasting methods used in business. Topics may include seasonal adjustment of time series; exponential smoothing models; ARCH/GARCH models for varying volatility in financial returns; diffusion models for new product forecasting; Box-Jenkins models; and modeling multiple time series. Each topic is illustrated with real data. Additional prerequisite: Statistics 371G, 371H, 375, or 375H.

### STA 375. Statistics and Modeling for Finance.

Restricted to students in the McCombs School of Business. Methods used to model and analyze data, especially as applied to problems related to finance. Explores regression models, time-series models, decision analysis and simulation-based methods. Three lecture hours a week for one semester. Only one of the following may be counted: Statistics 371G, 371H, 375, 375H. Prerequisite: Management Information Systems 301, 301H, or 310; Mathematics 408D, 408L, 408M or 408S; Statistics 309 or 309H; and credit or registration for Business Administration 324 or 324H.

### STA 375H. Statistics and Modeling for Finance: Honors.

Restricted to students admitted to the McCombs School of Business Honors Program. Methods used to model and analyze data, especially as applied to problems related to finance. Explores regression models, timeseries models, decision analysis and simulation-based methods. Three lecture hours a week for one semester. Only one of the following may be counted: Statistics 371G, 371H, 375, 375H. Offered on the letter-grade basis only. Prerequisite: Management Information Systems 301, 301H, or 310; Mathematics 408D, 408L, 408M or 408S; Statistics 309 or 309H; and credit or registration for Business Administration 324H.

### STA 376. Intermediate Statistics.

Restricted to students in a business major. Analysis of forecasting techniques and theory; macroeconomic models; long-range and short-term forecasting; forecasting for the firm, using case material. Three lecture hours a week for one semester. Prerequisite: Statistics 309 or 309H.

## **Department of Management**

### **Management: MAN**

**Lower-Division Courses** 

### **Upper-Division Courses**

## MAN 320F. Foundations of Management and Organizational Behavior.

Restricted to non-McCombs School of Business majors. An introduction to the management of organizations. Issues are addressed from the perspectives of strategy and planning, organizational behavior, and operations management. Three lecture hours a week for one semester. Management 320F and 336 may not both be counted. May not be counted toward the Bachelor of Business Administration degree. Prerequisite: Upper-division standing.

### MAN 325. Strategic Human Resources Management.

Restricted to students in a business major. Overview of the personnel function, covering recruitment, compensation, equal employment, job analysis, training, benefits, employee discipline, collective bargaining, safety, and health. Three lecture hours a week for one semester. Prerequisite: Credit or registration for Management 336 or 336H.

### MAN 327. Innovation and Entrepreneurship.

Explores the theoretical foundations and research evidence underlying innovation and entrepreneurship. Subjects include discovering and creating new sources of value, recognizing and evaluating opportunities, generating business models, engaging stakeholders, shaping markets, and competing against larger competitors and entrenched institutions. Three lecture hours a week for one semester. Management 327 and 327H may not both be counted. Offered on the letter-grade basis only. Prerequisite: Twenty-four semester hours of college credit.

### MAN 327E. New Venture Mechanics.

Starting up a new venture involves a wide range of decisions, activities, and processes such as those involved in identifying the potential of an idea, developing and protecting an idea, building a new venture team, creating a business plan, obtaining resources, and establishing a business entity. Covers the basic analytical tools and processes involved in all these aspects of founding a new business. Three lecture hours a week for one semseter. Management 327E and 337 (Topic: New Venture Mechanics) may not both be counted. Offered on the letter-grade basis only. Prerequisite: Twenty-four semester hours of college credit.

### MAN 327H. Innovation and Entrepreneurship: Honors.

Restricted to students admitted to the McCombs School of Business Honors Program. Examines the knowledge and skills used to discover and create new sources of value, develop ideas into viable businesses, recognize and shape opportunities, generate new business models, engage with the ecosystem of new ventures, launch new businesses, and manage an innovation portfolio. Draws on various theoretical foundations, research evidence, and business cases to develop an understanding of effectiveness in entrepreneurship and innovation. Three lecture hours a week for one semester. Management 327 and 327H may not both be counted. Offered on the letter-grade basis only. Prerequisite: Twenty-four semester hours of college credit, including Mathematics 408D, 408L, or 408S and credit or registration for Business Administration 324H.

### MAN 328. Consulting and Change Management.

Restricted to students in a business major. Designed to develop the fundamental change knowledge and consulting skills of students who plan to work with organizations as change agents, whether internally as managerial employees or externally as outside consultants. Three lecture hours a week for one semester. Prerequisite: Management 336 or 336H with a grade of at least C-.

### MAN 334M. Healthcare System Management.

Introduction to the business ecosystem of the U.S. healthcare industry using a multi-disciplinary approach to investigate business structures, processes, and outcomes of health services in America. Explores the functionality of various healthcare components. Three lecture hours a week for one semester. Management 334M and 337 (Topic: Healthcare System Management) may not both be counted. Offered on the lettergrade basis only. Prerequisite: Upper-division standing.

### MAN 336. Organizational Behavior.

Restricted to students in a business major. The process of managing organizations and the behavior of individuals and groups within the organizational setting. Three lecture hours a week for one semester. Management 336 and 336H may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Business Administration 324 or 324H; and credit or registration for three semester hours of coursework in anthropology, psychology, or sociology, or Educational Psychology 304.

### MAN 336H. Organizational Behavior: Honors.

Restricted to students admitted to the McCombs School of Business Honors Program. An exploration of the process of managing organizations and the behavior of individuals and groups within the organizational setting. Three lecture hours a week for one semester. Management 336 and 336H may not both be counted. Offered on the letter-grade basis only. Prerequisite: Accounting 312H; credit or registration for Business Administration 324H; and thirty semester hours of coursework, including credit or registration for three semester hours of coursework in anthropology, psychology, or sociology, or Educational Psychology 304.

### MAN 137, 237, 337. Special Topics in Management.

Analysis of contemporary management problems. For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic. Topic 2: Interdisciplinary Entrepreneurship. Restricted to students in a business major. Focus on skill development and mentoring in startup formation, technology development, market validation, marketing, sales, operations, human resources, program management, and finance. Includes discussion of intellectual property, social issues in design, as well as ethical and safety considerations. Emphasis on written and oral presentation of start-up activities. Only one of the following may be counted: Computer Science 374L, 378 (Topic: Longhorn Startup), Electrical Engineering 377E, Engineering Studies 377E, Management 337 (Topic: Interdisciplinary Entrepreneurship), 337 (Topic 2). Additional prerequisite: Consent of instructor. Topic 3: Intercultural Management. Provides a conceptual framework and specific tools for interacting successfully in international teams, negotiations, and partnerships. Discusses cultural patterns characteristic of world regions and particular countries in terms of their implications for corporate management. Management 337 (Topic: Intercultural Management) and 137, 237, 337 (Topic 3) may not both be counted.

**Topic 4: Leading for Impact.** Restricted to students in the McCombs School of Business. Explore leadership and personal development by engaging in personal assessments, action planning, peer discussion, and self-reflection in an interactive format. Management 337 (Topic: Leading for Impact) and 137, 237, 337 (Topic 4) may not both be counted.

**Topic 5: Technology Transfer and Entrepreneurship.** Restricted to students in a business major. Explores creating wealth from scientific discovery, which is the core of any business enterprise. Flight, computers, automobiles cell phones and petroleum enterprises all start with science. Divided into teams which design a business model for wealth creation around a patent (science), this activity is grounded in the entrepreneurial process, which includes business models, eco-systems, funding the enterprise, and business plans. Teams present their "big idea" that is grounded in patents at the end of the class period. Management 337 (Topic: Technology Transfer and Entrepreneurship) and 137, 237, 337 (Topic 5) may not both be counted.

**Topic 9: Leadership Issues.** Restricted to students in a business major. Three lecture hours a week for one semester. Additional prerequisite: Management 336 or 336H with a grade of at least C-. **Topic 20: Entrepreneurial Management.** Restricted to students in a business major. Covers the life cycle of an entrepreneurial business, including evaluating the attractiveness of an idea, launching and growing the business, and harvesting the profits. Three lecture hours a week for one semester. Additional prerequisite: Accounting 311 or 311H; Management 336 or 336H with a grade of at least C-; and credit or registration for Finance 357 or 357H.

**Topic 21: The Art and Science of Negotiation**. Restricted to students in a business major. Designed to help students develop a broad array of negotiation skills and to understand negotiations in useful analytical frameworks. Emphasis is placed on simulations, roleplaying, and cases. Three lecture hours a week for one semester. Additional prerequisite: Management 336 or 336H with a grade of at least C-.

**Topic 22: Women in Management.** Additional prerequisite: Completion of forty-five semester hours of coursework.

## MAN 137C. Introduction to Management in a Global Environment.

Restricted to students accepted to the Global Management Certificate program. Develops students' skills in recognizing cultural tendencies, both in themselves and in new geographic locations; introduces observation and reflection techniques to maximize learning while abroad. Course must be taken before participation in the international experience component required by the Global Management Certificate. One lecture hour a week for one semester. Only one of the following may be counted toward the Global Management Certificate: Applied Learning and Development 119, 219, 319, 419, 519, 619, 179, 279, Liberal Arts 119, 219, 319, 129, 229, 329, Management 137C, 337 (Topic: Intercultural Management), 379, 479, 579, 679. Offered on the letter-grade basis only.

### MAN 237D. Global Management Capstone.

Restricted to students accepted to the Global Management Certificate program. Develops students' ability to process and articulate learning from intercultural experience; develops skills in applying knowledge and strategies gained in one region/country to new cultural and geopolitical contexts. Two lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Management 137C, completion of required international experience component of the Global Management Certificate, and consent of instructor.

### MAN 338. Lean Startup Essentials.

Focus on the entrepreneurial process including problem identification, innovation, business plans, fund raising, legal aspects, launching, and management. Three lecture hours a week for one semester. Management 337 (Topic: Lean Startup Essentials) and 338 may not both be counted. Prerequisite: Thirty semester hours of coursework.

### MAN 140S, 240S, 340S, 440S, 540S, 640S, 740S, 840S, 940S. Topics in Management.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office or the school's BBA Exchange Programs. Credit is recorded as assigned by the study abroad adviser in the Department of Management. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. May be repeated for credit when the topics vary.

### MAN 347P. Entrepreneurship Practicum.

Application of entrepreneurship skills and focus on additional project management skills through individual or group assignments conducted in an entrepreneurial setting, focusing on new business development either within existing companies (corporate entrepreneurship) or as stand-alone ventures (entrepreneurship). Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upperdivision standing.

## MAN 366P. Management Practicum: Social Entrepreneurship I.

Focuses on developing business plans through a semester-long project. Explores non-profit, for-profit, and hybrid organizations and how they deal with corporate social responsibility. The equivalent of three lecture hours a week for one semester. Management 366P and 369P may not both be counted. Prerequisite: Upper-division standing; and Management 320F, 336, or 336H.

### MAN 367P. Social Entrepreneurship II.

Students apply skills and focus on readying chosen projects to increase awareness and understanding of business and economics issues, and prepare presentation teams for regional and national competitions based on criteria set by the international Enactus organization. The equivalent of three lecture hours a week for one semester. May be repeated for credit. Prerequisite: Upper-division standing and Management 366P.

### MAN 369P. Social Innovation Practicum.

Explores a broad overview of the field of social innovation, and examines concepts and tools that support the creation of social ventures. Includes creating a social venture, articulating its vision, creating a business plan, choosing an organizational form, and assessing the venture's financial and social impact. Three lecture hours a week for one semester.

Management 366P and 369P may not both be counted. Offered on the letter-grade basis only. Prerequisite: Upper-division standing.

### MAN 374. General Management and Strategy.

Restricted to students in a business major. Designed to enable students to analyze business situations from the point of view of the practicing general manager. Addresses key tasks involved in general management, including strategic decisions that ensure the long-term health of the entire firm or a major division. Three lecture hours a week for one semester. Management 374 and 374H may not both be counted. Prerequisite: Seventy-five semester hours of coursework, including: Management 336 or 336H; credit or registration for Finance 357 or 357H, and Marketing 337 or 337H; and credit or registration for one of the following: Accounting 353J, 366P, Business Administration 353, 353H, Finance 353, 366P, Management 347P, 353, 366P, 367P, 369P, Management Information Systems 353, 366P, Marketing 353, 366P, Operations Management 353, or 366P.

### MAN 374H. General Management and Strategy: Honors.

Restricted to students admitted to the McCombs School of Business Honors Program. Designed to enable students to analyze business situations from the point of view of the practicing general manager. Addresses key tasks involved in general management, including strategic decisions that ensure the long-term health of the entire firm or a major division. Three lecture hours a week for one semester. Management 374 and 374H may not both be counted. Offered on the letter-grade basis only. Prerequisite: Senior standing; Finance 357H; Management 336H; Marketing 337H; credit or registration for Operations Management 335H; and credit or registration for one of the following: Accounting 353J, 366P, Business Administration 353, 353H, Finance 353, 366P, Management 347P, 353, 366P, 367P, 369P, Management Information Systems 366P, Marketing 366P, Operations Management 353, or 366P.

### MAN 179C, 379C. Independent Research in Management.

Restricted to students in a business major. Conference course. Only two of the following may be counted toward the Bachelor of Business Administration: Accounting 179C, 379C, Business, Government, and Society 179, 379, Finance 179C, 379C, International Business 179C, 379C, Legal Environment of Business 179, 379, Management 179C, 379C, Management Information Systems 179, 379, Marketing 179C, 379C, Operations Management 179, 379, Real Estate 179C, 379C, Risk Management 179, 379. Prerequisite: Eighteen semester hours of coursework in business and economics, six of which must be upperdivision; Management 336 or 336H with a grade of at least C-; consent of instructor; written approval before the first meeting of the course from the department chair's office on forms provided for that purpose.

## **Department of Marketing**

### International Business: I B

**Lower-Division Courses** 

### **Upper-Division Courses**

### I B 320F. Foundations of International Business.

Restricted to non-McCombs School of Business majors. Fundamentals of international trade and the international economy; international dimensions of several functional areas of business, including management, marketing, finance, and human resource management; theoretical, institutional, and functional foundations of international business. Three lecture hours a week for one semester. May not be counted toward the Bachelor of Business Administration degree. Only one of the following courses may be counted: Economics 339K,

### I B 140S, 240S, 340S, 440S, 540S, 640S, 740S, 840S, 940S. Topics in International Business.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office or the school's BBA Exchange Programs. Credit is recorded as assigned by the study abroad adviser in the Department of Marketing. University credit is awarded for work in an exchange program; it may be counted a coursework taken in residence. May be repeated for credit when the topics vary.

### I B 350. International Trade.

Same as European Studies 348 (Topic 2). Study of the principles, policies, and problems of the international exchange of goods and investments. Three lecture hours a week for one semester. Only one of the following may be counted: Economics 339K, European Studies 348 (Topic 2), International Business 320F, 350, 350S. Prerequisite: Upperdivision standing.

### I B 350S. International Commerce Analysis.

Study of the principles, policies, and problems of the international exchange of goods and investments. This course is used for classes taken on an approved study abroad program with the content equivalent of International Business 350. The equivalent of three lecture hours a week for one semester. Only one of the following may be counted: Economics 339K, European Studies 348 (Topic 2), International Business 320F, 350, 350S. Offered on the letter-grade basis only. Prerequisite: Consent of Instructor.

### I B 151S. Independent International Analysis.

Restricted to students in a business major. Country analysis by independent study. Designed for marketing majors who participate on a McCombs summer faculty led program. Conference course. Offered on the letter-grade basis only. Prerequisite: Credit or registration for International Business 350S; and approval from the BBA Program Office before the first meeting of the course.

### I B 172, 272, 372. Seminar in International Business.

For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites vary with the topic.

- Topic 1: International Marketing.
- Topic 3: Managing the Global Corporation.
- Topic 4: Competing with the Japanese.
- Topic 5: Business in Latin America.

**Topic 6: Business German.** German 356W and International Business 172 (Topic 6), 272 (Topic 6), 372 (Topic 6) may not both be counted. Additional prerequisite: German 312K or 312V with a grade of at least C-, or appropriate score on the placement test.

**Topic 7: Advanced Business German.** Designed for students who have taken German 328. Taught in German. Normally meets with German 336W. German 336W and International Business 172 (Topic 7), 272 (Topic 7), 372 (Topic 7) may not both be counted. May be counted toward the international business elective requirement. Additional prerequisite: Three courses beyond German 506, or equivalent credit on the placement test.

**Topic 8: Business Spanish.** International Business 172 (Topic 8), 272 (Topic 8), 372 (Topic 8) and Mexican American Studies 350 may not both be counted. Additional prerequisite: Spanish 327G.

**Topic 9: Business French.** Taught in French. Additional prerequisite: French 320E and one additional upper-division French course, or consent of instructor. **Topic 10: Exporting for Entrepreneurs.** Practicum-based course exploring the challenges associated with developing an export strategy for an existing start-up and/or small business. Covers topics surrounding export management as well as how business functions are impacted by a desire to export. International Business 372.10 and 372 (Topic: Exporting for Entrepreneurs) may not both be counted. **Topic 11: Global Entrepreneurship.** A practical guide to starting, managing and exiting a business in a global context. Aspects of global entrepreneurship including opportunity analysis, business planning, fundraising, competing in a global marketplace, and managing through crisis explored through practical experience and real-world examples. International Business 372 (Topic: Global Entrepreneurship) and 172, 272, 372 (Topic 11) may not both be counted.

### I B 373. Business in Emerging Markets.

Same as Latin American Studies 322 (Topic 9) and Middle Eastern Studies 341 (Topic 2). Only one of the following may be counted: International Business 372 (Topic 2), 373, Latin American Studies 322 (Topic 9), Middle Eastern Studies 341 (Topic 2). Prerequisite: Upperdivision standing.

### I B 378. International Business Operations.

Restricted to students in a business major. Establishment and conduct of international business operations: trade, investments, branch and subsidiary management, intermediary functions; case studies in international enterprise. Three lecture hours a week for one semester. Prerequisite: Upper-division standing; at least seventy-five semester hours of coursework, including Economics 339K or International Business 350; and credit or registration for one of the following: Accounting 353J, 366P, Business Administration 353, 353H, Finance 353, 366P, Management 347P, 353, 366P, 367P, 369P, Management Information Systems 353, 366P, Marketing 353, 366P, Operations Management 353, 366P.

## I B 179C, 379C. Independent Research in International Business.

Restricted to students in a business major. Conference course. Only two of the following may be counted toward the Bachelor of Business Administration: Accounting 179C, 379C, Business, Government, and Society 179, 379, Finance 179C, 379C, International Business 179C, 379C, Legal Environment of Business 179, 379, Management 179C, 379C, Management Information Systems 179, 379, Marketing 179C, 379C, Operations Management 179, 379, Real Estate 179C, 379C, Risk Management 179, 379. Prerequisite: Eighteen semester hours of coursework in business and economics, six of which must be upperdivision; International Business 350 with a grade of at least C-; and consent of instructor. A student registering for this course must obtain written approval from the department chair's office, on forms provided for that purpose, before the first meeting of the course.

## Marketing: MKT Lower-Division Courses Upper-Division Courses

### MKT 320F. Foundations of Marketing.

Restricted to non-McCombs School of Business majors. Introduction to basic concepts and terminology in marketing: the process of developing marketing strategy, the role of marketing activities within the firm, external influences that affect the development of marketing strategy, and basic analytical tools appropriate to marketing decision making. Three lecture hours a week for one semester. Marketing 320F and 337 may not both be counted. May not be counted toward the Bachelor of Business Administration degree. Prerequisite: Upper-division standing.

### MKT 337. Principles of Marketing.

Restricted to students in a business major. Designed to expand understanding of the marketing system and basic marketing activities and to provide a framework for marketing strategy development and implementation of marketing tools and tactics. Three lecture hours a week for one semester. Marketing 337 and 337H may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Business Administration 324 or 324H; and credit or registration for Statistics 309 or 309H.

### MKT 337H. Principles of Marketing: Honors.

Restricted to students admitted to the McCombs School of Business Honors Program. Designed to expand understanding of the marketing system and basic marketing activities and to provide a framework for marketing strategy development and implementation of marketing tools and tactics. Three lecture hours a week for one semester. Marketing 337 and 337H may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Accounting 312H, Business Administration 324H, Economics 304K and 304L, and Statistics 309 or 309H.

### MKT 338. Promotional Policies.

Restricted to students in a business major. Analysis of the use of promotional methods in marketing: advertising, personal selling, sales promotion, and indirect promotion; their social and economic consequences; their coordination and relationship to other business functions. Three lecture hours a week for one semester. Prerequisite: Marketing 337 or 337H.

### MKT 140S, 240S, 340S, 440S, 540S, 640S, 740S, 840S, 940S. Topics in Marketing.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office or the school's BBA Exchange Programs. Credit is recorded as assigned by the study abroad adviser in the Department of Marketing. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. May be repeated for credit when the topics vary.

### MKT 460. Information and Analysis.

Restricted to students in a business major. The development and analysis of information for marketing management sources. Three lecture hours and one discussion hour a week for one semester. Prerequisite: Marketing 337 or 337H, and Statistics 309 or 309H.

### MKT 363. Professional Selling and Sales Management.

Policies, operation, coordination, and control of personal selling activities in marketing organizations. Three lecture hours a week for one semester. Prerequisite: Marketing 320F or 337 or 337H.

### MKT 366P. Marketing Practicum.

Restricted to students in a business major. Students apply skills in their major area and focus on additional project management skills through group projects conducted in a professional setting. Students may work with a private or a public enterprise. The equivalent of three lecture hours a week for one semester. Prerequisite: Completion of forty-five semester hours of coursework, Marketing 337 or 337H, and consent of instructor.

### MKT 370. Marketing Policies.

Restricted to students in a business major. A capstone course focusing on case studies of advanced marketing problems, including analysis of markets, promotional planning, pricing, and distribution coordination. Designed to help the student develop a comprehensive understanding of marketing policy and strategy formulation. Three lecture hours a week for one semester. Prerequisite: Ninety semester hours of college coursework, including Marketing 337 or 337H, and 460; credit or registration for one of the following: Accounting 353J, 366P, Business Administration 353, 353H, Finance 353, 366P, Management 347P, 353, 366P, 367P, 369P, Management Information Systems 353, 366P, Marketing 353, 366P, Operations Management 353, or 366P; and three additional semester hours of elective coursework in marketing.

### MKT 370K. Retail Merchandising.

Restricted to students in a business major. Designed to familiarize the student with all the activities associated with the sale of goods and services for final consumption and to provide an overview of the decisions involved in merchandising and management, including factors that influence and determine those decisions. Three lecture hours a week for one semester. Prerequisite: Marketing 337 or 337H.

### MKT 172, 272, 372. Marketing Seminar.

Restricted to students in a business major. For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Marketing 337 or 337H; additional prerequisites vary with topic.

Topic 1: Market Area Decisions.

Topic 2: Consumer Behavior.

**Topic 3: Implementing Marketing Concepts.** Implementation of marketing concepts in a real-world setting through participation in marketing projects with area companies. Additional prerequisite: Consent of instructor.

**Topic 4: Global Marketing.** May be used in place of International Business 372 in fulfilling the requirements of the major in international business.

Topic 5: Design Thinking for Business Innovation. Focuses on gaining a theoretical understanding of design thinking, including: Customerfocus, cross-functional collaboration, and an iterative process for refining products and services. Intended for budding entrepreneurs and those interested in understanding the processes involved in taking a new product/service idea to market. Marketing 372.5 and 372 (Topic: Design Thinking for Busn Innov) may not both be counted. Topic 6: Marketing for Entrepreneurs. Focuses on the issues facing smaller and start-up businesses, including introduction to entrepreneurship, differentiation of the offering, mass markets versus selective markets, guerilla marketing, the business model and business plan, and capital markets. Marketing 372 (Topic: Marketing for Entrepreneurs) and 372 (Topic 6) may not both be counted. Topic 11: Brand Management. Addresses the strategic importance of branding and concepts, frameworks, and strategies for building, leveraging, and defending strong brands. Current opportunities and challenges in a variety of industries and markets, including consumer packaged goods, business-to-business, services, technology, online, and global. Marketing 372 (Topic: Brand Management) and 172, 272, 372 (Topic 11) may not both be counted.

**Topic 12: Contemporary Issues in Marketing.** Covers current marketing challenges including reality ethics marketing services, anticipating and using market trends, and capturing the attention of the brain. Marketing 372 (Topic: Contemporary Issues in Marketing) and 172, 272, 372 (Topic 12) may not both be counted.

**Topic 13: Integrated Marketing Communications.** Exploration of basic message development and dissemination across ever evolving media types, using a focus on the brain and emotions, as well as an intense examination of persuasion and core belief formation. Focus on group development of an IMC plan for a social issue. Marketing 372 (Topic: Integrated Marketing Communications) and 172, 272, 372 (Topic 13) may not both be counted.

**Topic 14: Pricing and Channels.** Explores the concepts, theory and latest thinking bearing on the key issues in pricing and channels, taking the perspective of the marketing manager. Provides

an opportunity, through extensive case analyses and multiple assignments, to apply concepts and theory to the solution of pricing and channel problems in realistic business settings. Marketing 372 (Topic: Pricing and Channels) and 172, 272, 372 (Topic 14) may not both be counted.

**Topic 15: Corporate Political Strategy.** A study of how the political and regulatory environment enables and constrains business activity and how individual firms and groups of firms can ethically yet effectively lobby legislatures, negotiate with regulators, create industry associations, make campaign contributions, and engage in other political activity to gain competitive advantage. Only one of the following may be counted: Business, Government, and Society 371, Marketing 372 (Topic: Corporate Political Strategy), 172, 272, 372 (Topic 15).

**Topic 16: Business to Business Marketing.** Focus on business to business marketing skills including: organizational buying and selling models; launching business to business products and services; pricing a product line; sales management and support; managing distribution partners; and social media for business to business promotion. Marketing 372 (Topic: Business to Business Marketing) and 172, 272, 372 (Topic 16) may not both be counted.

**Topic 17: Consumer Behavior in a Digital World**. Examines the core psychological processes underlying consumer decision-making and behavior, and the impact of recent technological advancements on consumer behavior in on and offline environments. Marketing 372 (Topic: Consumer Behavior in a Digital World) 372 (Topic 17) may not both be counted.

**Topic 18: Creativity and Leadership.** Exploration of the determinants for a meaningful and fulfilling life. Marketing 372 (Topic: Creativity and Leadership) and 172, 272, 372 (Topic 18) may not both be counted. **Topic 19: Marketing Analytics II.** Covers advanced analytics problems focusing on methodologies and their implementations, how marketing analytics allows companies to gain an advantage by serving customers better than their competitors. Marketing 372 (Topic: Marketing Analytics II) and 172, 272, 372 (Topic 19) may not both be counted.

**Topic 21: Strategic Product Management.** Explores the principles of product management including identifying new growth opportunities, assessing the health and profitability of a product portfolio, developing new products, and positioning and repositioning of current products. Analytical tools, case discussions, and real-world derived projects will be the key learning tools. Marketing 372 (Topic: Strategic Product Management) and 172, 272, 372 (Topic 21) may not both be counted.

**Topic 22: Predictive Analytics and Data Mining.** Comprehensive introduction to data mining problems and tools to enhance managerial decision making at all levels of the organization. Discuss scenarios including the use of data mining to support customer relationship management (CRM) decisions, decisions in the entertainment industry, financial trading, and even professional sports teams. No technical skills or prior knowledge required. Only one of the following may be counted: Management Information Systems 373 (Topic 17), Marketing 372 (Topic: Predictive Analytics and Data Mining), 372 (Topic 22).

**Topic 23: Data Analytics for Marketing.** Introduction to the world of making more effective marketing decisions through the use of data. Examines sources of data, methods of collecting and cleaning the data, analyzing the data, and finally presenting the data in meaningful and impactful ways. Using real-world data and applications from a variety of industries, the objective is to assist in familiarizing with the empirical and analytical tools needed to make effective marketing decisions in the age of large and plentiful datasets. Marketing 372 (Topic: Data Analytics for Marketing) and 172, 272, 372 (Topic 23) may not both be counted.

**Topic 24: Digital Marketing.** Explore online marketing strategies; navigate online advertising, search, social media, and online privacy; and design and implement an experiment to evaluate the effectiveness of online business decisions. Marketing 372 (Topic: Digital Marketing) and 172, 272, 372 (Topic 24) may not both be counted.

**Topic 25: Data Driven Marketing.** Exploration of marketing research analytics using various types of data analytics and statistical learning models. Marketing 372 (Topic: Data Driven Marketing) and 172, 272, 372 (Topic 25) may not both be counted.

**Topic 26: Strategy Consulting for Marketers.** Hands-on introduction to the science and art of marketing strategy consulting. Explores the consulting industry and the key concepts of successful consulting. Execution of a complete consulting engagement with an actual client. Marketing 372 (Topic: Strategy Consulting for Marketers) and 172, 272, 372 (Topic 26) may not both be counted.

**Topic 27: Reputational Risk and Crisis Management.** Exploration of what risk is, crisis management techniques, market communications, and reputational preservation via readings, cases and guest speakers. Marketing 372 (Topic: Reputational Risk and Crisis Management) and 172, 272, 372 (Topic 27) may not both be counted.

### MKT 178, 278, 378. Marketing Micro-topics.

Focuses on contemporary, in-demand marketing topics to help develop the foundational knowledge, hands-on experience, and skills for today's marketing ecosystem. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with topic

### MKT 179C, 379C. Independent Research in Marketing.

Restricted to students in a business major. Conference course. Only two of the following may be counted toward the Bachelor of Business Administration: Accounting 179C, 379C, Business, Government, and Society 179, 379, Finance 179C, 379C, International Business 179C, 379C, Legal Environment of Business 179, 379, Management 179C, 379C, Operations Management 179, 379, Real Estate 179C, 379C, Risk Management 179, 379. Prerequisite: Eighteen semester hours of coursework in business and economics, six of which must be upperdivision; Marketing 337 or 337H with a grade of at least C-; and consent of instructor. A student registering for this course must obtain written approval from the department chair's office, on forms provided for that purpose, before the first meeting of the course.

## Moody College of Communication

Jay M. Bernhardt, PhD, Dean Mark E. Bernstein, EdD, Associate Dean, Undergraduate Education Anita L. Vangelisti, PhD, Associate Dean, Research and Graduate Education Karin G. Wilkins, PhD, Associate Dean, Faculty Advancement and Strategic Initiatives Kimberly L. Biar, BBA CPA, Executive Director, Business and Technology Services Darrell D. Rocha, BA, Assistant Dean Michael J. Wilson, BJ, Assistant Dean, External Relations https://moody.utexas.edu/

## **General Information**

## Mission

The mission of the Moody College of Communication at The University of Texas at Austin is to advance and enhance society through the study and practice of human communication. We pursue our mission through world-class teaching, scholarship, public service, and our shared commitment to collaboration that bridges disciplines within the college, across the university, and around the world. We draw energy and inspiration from the vibrant community of Austin, Texas to reinforce our core values of knowledge, innovation, collaboration, creativity, integrity, and diversity. We all firmly believe that the communication arts and sciences are fundamental for humanity, critical for community, and essential for prosperity.

Moody College is preparing students to better society by enabling them to make the communication breakthroughs of tomorrow. While the media, channels and tools used to communicate are constantly changing, the foundational skills needed to be effective communicators remain the same. Students will become prepared to adapt to a dynamic field while learning the principles needed to become effective, ethical communicators.

Students can choose from seven degree programs: Advertising; Communication and Leadership; Communication Sciences and Disorders; Communication Studies; Journalism; Public Relations; and Radio-Television-Film. Students benefit from interdisciplinary approaches to communication education and exposure to a broad range of perspectives—ultimately preparing them to succeed across the range of communication disciplines and industries.

Moody College also offers numerous minors in various communication fields to help students supplement other areas of study and their effectiveness in a range of professions. Minors include: Sports and Media; Communication Studies; Science Communication; Health Communication; U.S. Latino and Latin American Media Studies; Journalism; and Visual Media.

## Facilities

In addition to the extensive library and computer resources of the university, certain special resources provide support for work in communication. Chief among them is the Belo Center for New Media (BMC), which opened in summer 2012. The BMC is a 5-level 120,000 square-foot facility that weds cutting-edge technology with innovative teaching and research methods. The Belo Center is home to the KUT Public Broadcast Center, the School of Journalism, the Stan Richards School of Advertising & Public Relations, and the Moody College of Communication Dean's Office. The Belo Center houses a multitude of instructional, research, and meeting spaces including a 300-seat auditorium, a 120-seat lecture hall, and an executive briefing facility, as well as a theatrical-grade 75-seat presentation room. The KUT Public Broadcast center is housed in a two-story, 20,000 square-foot wing which includes a 72-seat, glass-walled performance studio that incorporates the community into some of KUT's 300 annual in-studio performances.

The Jesse H. Jones Communication Center in Communication Building A (CMA) is a six-level building housing classrooms, offices, and sophisticated technology facilities. All facilities offer pervasive wireless internet access and all instructional and production spaces feature high-definition equipment. Communication Building B (CMB), a ninelevel production building, houses teaching and production facilities for the School of Journalism and the Department of Radio-Television-Film. These facilities provide opportunities for academic programs that cross disciplinary lines, interrelate traditional and online media, and otherwise combine the resources of the College in ways not feasible within any one of the component

# Financial Assistance Available through the College

The Moody College of Communication and each academic unit have a large number of scholarships that are awarded annually. Students interested in receiving one of these scholarships should apply online early in the spring semester for scholarships to be awarded the following academic year. More information about college scholarships is available at http://moody.utexas.edu/students/scholarships and from the Student Advising Office.

## **Student Services**

### Academic Advising

The Student Advising Office, in collaboration with the academic departments, oversees all advising in the college. To allow in-depth advising on specific programs of study, courses, and career choices in the major, each student is assigned an adviser. Students should meet with their advisers to select courses appropriate to the degree and to ensure that all degree requirements are met. In addition, students should consult their advisers for assistance in preparing for graduation.

### **Career Services**

Communication Career Services (CCS) (https://moody.utexas.edu/ career-services) provides a variety of career development and job/ internship search assistance programs for students and alumni. The office's online systems link clients to the CCS job and internship databases and on-campus interviewing and résumé referral programs. Communication job and internship fairs, on-campus interviews, and a wide range of job search workshops and career exploration programs provide networking opportunities and allow students to explore their career options, gain experience, and build their career management skills. Individual career counseling, pre-law advising, a career planning and management course, and a robust website offer additional resources to help candidates research and prepare for the job market in a wide variety of media, communication, and related industries.

As a complement to the assistance available from the college, the University's Sanger Learning Center and the Center for Strategic Advising and Career Counseling in the School of Undergraduate Studies provide career counseling services to all students. The centers offer professional career counseling, skill and interest inventories and tests, and assistance to students in choosing or changing their majors and considering graduate study. The University makes no promise to secure employment for each graduate.

## **Student Organizations**

Student organizations provide an opportunity for students to meet fellow students within their major, learn about a major or career, hear from professionals in the field, and gain hands-on experience in club administration and leadership. One organization students may join is the Communication Council, the governing body for student activities in the college. The Communication Council acts as a representative of all undergraduate communication students and sponsors collegewide programs such as Communication Week and Senior Celebration as well as other events throughout the year. A complete list of student organizations in the college is available at moody.utexas.edu/students/ communication-student-organizations.

## **Admission and Registration**

## Admission

### Admission to the University

Admission and readmission of undergraduate students to the University is the responsibility of the director of admissions. Information about admission to the University is given in *General Information* (http:// catalog.utexas.edu/general-information/admission/undergraduateadmission). Admission to a major may be restricted by the availability of instructional resources.

### **Admission Policies of the College**

Students admitted to the University with deficiencies in high school units must remove them by the means prescribed in *General Information* (http://catalog.utexas.edu/general-information/admission/ undergraduate-admission/#freshmanadmissiontext). Course credit used to remove deficiencies may not be counted toward the student's degree.

A few students who already have a bachelor's degree and who are not candidates for an advanced degree are admitted to the college each year as nondegree seeking students. Such students are admitted only with the approval of the appropriate academic unit head and the dean.

## Registration

General Information (http://catalog.utexas.edu/general-information/ registration-tuition-and-fees) gives information about registration, adding and dropping courses, transfer from one division of the University to another, and auditing a course. The *Course Schedule* (http:// registrar.utexas.edu/schedules), published before registration each semester and summer session, includes registration instructions, advising locations, and the times, places, and instructors of classes. The *Course Schedule* and *General Information* are published on the registrar's website, http://registrar.utexas.edu/.

Enrollment in upper-division courses in the Moody College of Communication may be restricted because of limitations on instructional resources.

## Academic Policies and Procedures

### **Requirements and Policies of the College**

All students must fulfill the General Requirements for graduation given in the University section. Students in the Moody College of Communication are also subject to the following requirements and policies:

- 1. All communication majors must have a grade of at least C- in each course taken in the Moody College of Communication that is counted toward the degree; if the course is offered on the pass/fail basis only, the course must have the symbol *CR*.
- 2. No more than 60 hours of communication coursework may count toward the degree.
- 3. At least 36 semester hours of upper-division coursework must be counted toward the degree.
- 4. Moody College students must complete at least 18 hours of inresidence upper-division coursework.
- 5. No student in the Moody College of Communication may repeat for credit a course in which he or she has earned a grade of C- or better, unless otherwise specified in the catalog.
- 6. A student may declare only one minor or certificate to supplement their Moody major(s); exceptions must be approved by the Dean. Moody students must declare their minor/certificate intentions before they have completed 65% of their degree requirements, as indicated on the Interactive Degree Audit (IDA); exceptions must be approved by the Dean.

## **Applicability Of Certain Courses**

### **Internship Credit**

Some communication degree programs require an internship; in other programs, students may elect to complete an internship. Up to but no more than six semester hours of credit in internship courses may be counted toward the student's degree.

### **Physical Activity Courses**

Physical activity (PED) courses are offered by the Department of Kinesiology and Health Education. No more than one hour of PED coursework may be counted toward a degree in the Moody College of Communication. This hour shall be counted as a non-major elective and the grade earned will be included in the grade point average.

### **Music Performance Courses**

Music performance courses are offered by the College of Fine Arts under the fields of study ensemble, music, and as individual instruction in a particular instrument. No more than one hour of music performance coursework may be counted toward a degree in the Moody College of Communication. This hour shall be counted as non-major elective and the grade earned will be included in the grade point average.

### Transfer Coursework

No more than 12 semester hours of transfer credit may be counted toward a student's major requirements.

### **Concurrent Enrollment**

No more than 30 percent of the semester hours required for any degree offered in the Moody College of Communication may be taken at another institution while a student is simultaneously enrolled in residence at the university.

### **Courses Taken on the Pass/Fail Basis**

Moody College courses taken on the pass/fail basis cannot be counted toward the degree, unless they are offered only on the pass/fail basis. No course required for the degree and taken in residence may be counted if taken on the pass/fail basis, unless the course is offered only on that basis. However, a student may elect to count up to 15 hours of free elective coursework taken on the pass/fail basis. Credit earned by examination is not counted toward the total number of hours that the student may take pass/fail.

### **Courses Taken in other Fields of Study**

No more than 36 semester hours in a field of study other than the field of study in which the student is majoring may be counted toward a degree in the Moody College.

### **ROTC Courses**

No more than nine semester hours of credit for air force science, military science, or naval science courses may be counted toward any degree in the Moody College of Communication. Such coursework may be counted only as lower-division electives in degree programs that have room for such electives, and only by students who have completed the third and fourth years of the ROTC program. ROTC courses may not be substituted for any specific required course.

## Graduation

## Graduation

To be awarded a degree from the Moody College of Communication at The University of Texas at Austin, a candidate must complete 120 semester hours of coursework and must fulfill the University's General Requirements for graduation, the Core Curriculum requirements, the college graduation requirements, the requirements and policies listed in Academic Policies and Procedures, and the requirements given for the student's major under Prescribed Work, Major Requirements, and Special Requirements of the Major.

## **Graduation With University Honors**

Students who, upon graduation, have demonstrated outstanding academic achievement are eligible to graduate with University Honors. Criteria for graduation with University Honors are given in General Information (http://catalog.utexas.edu/general-information/academicpolicies-and-procedures/honors/#graduationwithuniversityhonorstext).

## **ROTC Degree Candidates**

An Air Force, Army, or Naval Reserve Officer Training Corps student who elects the basic and/or advanced program in air force science, military science, or naval science will not be approved for graduation until the student's government contract is completed or the student is released from the ROTC.

## Degree Audit

Students should verify the coursework they have completed and the coursework still needed for the degree by reviewing a degree audit at least once each semester with an adviser in the Student Advising Office. The degree audit is a computer-generated report of the student's progress in completing degree requirements. He or she may also create, print, and review an audit online through IDA, the Interactive Degree Audit system; information about IDA is available at http://registrar.utexas.edu/ students/degrees/ida/.

Although the degree audit normally provides an accurate statement of requirements, the student is responsible for knowing the requirements for the degree as stated in a catalog under which he or she is eligible to graduate and for registering so as to fulfill those requirements. Because the student is responsible for registering for the courses needed to fulfill degree requirements, he or she should seek an official ruling in the Student Advising Office before registering if in doubt about any requirement.

## **Degrees and Programs**

## **Degrees Offered**

In the Moody College of Communication, seven undergraduate degrees are offered: Bachelor of Science in Advertising, Bachelor of Science in Communication and Leadership, Bachelor of Science in Communication Sciences and Disorders, Bachelor of Science in Communication Studies, Bachelor of Journalism, Bachelor of Science in Public Relations, and Bachelor of Science in Radio-Television-Film. In addition to the core curriculum, the requirements of each degree consist of special requirements, prescribed work, and major requirements; these are given within the section associated with each degree.

A student may not earn more than two undergraduate degrees from the Moody College of Communication. A student may not earn both the Bachelor of Science in Advertising and the Bachelor of Science in Public Relations. A student may not earn both the Bachelor of Science in Communication and Leadership and the Bachelor of Science in Communication Studies.

## Moody College Honors Program

The Moody College Honors Program is dedicated to the *life of the mind* and the *life of the community*, preparing well-rounded thinkers and responsible leaders for a complex and diverse world of communication and media. It is a four-year enrichment program designed for undergraduates majoring in the Moody College and meant to supplement a student's major by counting toward college or degree electives.

The program has three main components: 1) a special 15-semester credit hour curriculum, 2) enrichment activities and 3) service obligations. Students should apply as incoming freshman but have an opportunity to enter the program later by applying in their first or second year.

The framework of the curriculum is outlined in the three following stages:

- 1. Two core classes, Communication 307H, Life of the Mind: Honors and COM 308H Life of Community: Honors (6 hours);
- 2. Elective seminars on special topics (between 3-9 hours, depending on the capstone option students choose);
- 3. A capstone requirement, with options that include a creative or service project, or a traditional academic thesis (between 3-6 hours)

Moody College Honors Program students will be assessed for continuing eligibility at the end of each academic year, and must meet the following standards: an overall GPA of at least 3.0; a GPA in Moody College coursework of at least 3.4; participation in Moody College Honors Program courses and activities, as described on the program website and by program faculty and staff. Moody College Honors Program students who do not meet these standards may be subject to dismissal from the program.

At the time of graduation, Moody College Honors Program students who have an overall GPA of at least 3.0 and a GPA in Moody College coursework of at least 3.4 will receive special recognition at commencement for successful completion of the program.

# Bachelor of Science in Advertising

To be awarded the degree of Bachelor of Science in Advertising, the candidate must complete 120 semester hours of coursework and must fulfill the University's General Requirements (p. 20) for graduation, the Core Curriculum (p. 23) requirements, the college graduation requirements, the requirements and policies listed in Academic Policies and Procedures, and the requirements given in Prescribed Work, Major Requirements, and Special Requirements of the Major, below.

## **Core Curriculum**

All students must complete the University's Core Curriculum (p. 23). In some cases, a course required for the Bachelor of Science in Advertising may also be counted toward the core curriculum.

### **Prescribed Work**

- 1. Three semester hours in English or rhetoric and writing in addition to the courses required by the core curriculum.
- 2. Three courses with a writing flag; one course with a quantitative reasoning flag; one course with a global cultures flag; one course with a cultural diversity in the United States flag; one course with an ethics flag; and one course with an independent inquiry flag. The same course cannot be used to satisfy the global cultures and cultural diversity flags even if the course carries both flags. Courses that fulfill flag requirements are identified in the Course Schedule (https://registrar.utexas.edu/schedules). They may also be used to fulfill other degree requirements.
- 3. Three semester hours of coursework in the Moody College of Communication dealing with the study of communication issues concerning at least one minority or non-dominant group within the United States. Courses that fulfill this requirement may also be used to fulfill other degree requirements. A complete list is available on the college's Student Advising website before registration for each semester and summer session.
- 4. Students must satisfy a foreign language and culture requirement in one of the following ways: (a) Demonstrating intermediate proficiency in a single foreign language; (b) Taking two consecutive courses in one language and one approved culture course in a culture that is relevant to the language. A list of approved culture and language courses and combinations will be posted on the Student Advising website before registration for each semester and summer session. An extensive foreign language testing program is available at the University. Students with knowledge of a language are encouraged to take appropriate tests both to earn as much credit as possible and to be placed at the proper level for further study. Students should consult with an academic adviser for information on testing.
- 5. At least six semester hours of coursework must be taken in the Moody College of Communication but outside the Stan Richards School of Advertising & Public Relations.
- Twelve hours of coursework in business, including Marketing 320F (Marketing 337 for students pursuing an additional major in business). At least six of the 12 hours must be upper-division.
- 7. At least 39, but no more than 45 semester hours of advertising, as described in Major Requirements, below.
- 8. Enough additional coursework to make a total of 120 semester hours.

## **Major Requirements**

At least 39, but no more than 45 semester hours of advertising, of which at least 24 hours must be upper-division. The following courses are required: Advertising 309R, 318J, 325, 344K, 345J, 350 or Advertising 468L, 370J, 353, 373, and twelve additional hours of advertising, nine of which must be upper-division.

## Special Requirements of the Major

To enroll in upper-division courses in the Stan Richards School, a student must have completed Advertising 318J with a grade of at least B. Students may enroll in Advertising 318J no more than twice.

Students who wish to count more than four hours of internship credit toward their degree must obtain approval from the Stan Richards School in advance if these additional hours will cause the student to exceed the maximum of 45 hours that a student may take in the Stan Richards School.

Any internship hours beyond 4 may not be counted toward the 39 required hours in the Stan Richards School.

Advertising majors must complete Advertising 309R, 318J, 370J, and 373 or 373H in residence.

A student may not earn both the Bachelor of Science in Advertising and the Bachelor of Science in Public Relations.

## The Consent Procedure

Some courses in the Stan Richards School of Advertising & Public Relations require that consent of the instructor must be received prior to registering. To be able to register for such a course, a student must first ask for and receive the instructor's consent. The student may be invited to an interview with the instructor or may be asked to provide supporting materials, such as an application or an essay. The student is responsible for knowing the deadline to apply. Consent forms are available from the student's adviser and in the Stan Richards School of Advertising & Public Relations.

Some students may wish to apply to one of two competitive elective sequences; these are the *creative* or *media* sequences. These sequences require consent to enroll.

## Order and Choice of Work

### First Year

- 1. The student must take three courses from the following group each semester:
  - a. Rhetoric and Writing 306.
  - b. Courses to be counted toward the American history, American and Texas government, social and behavioral sciences, mathematics, visual and performing arts, and science and technology requirements of the core curriculum.
  - c. Courses in a foreign language.
  - d. Courses that meet flag requirements.
- 2. Enough additional coursework to raise the student's course load to 15 or 16 hours each semester. Courses should be chosen with the guidance of a college adviser.

### Second Year

1. The student must take three courses from the following group each semester; four are recommended:

a. English 316L, 316M, 316N, or 316P, and any three-semester-hour course in English, or rhetoric and writing.

b. Courses to be counted toward the American history, American and Texas government, social and behavioral sciences, mathematics, visual and performing arts, and science and technology requirements of the core curriculum.

c. Courses in the foreign language, unless the language requirement has been fulfilled.

- d. Courses that meet flag requirements.
- 2. Advertising 318J.
- 3. Advertising 309R

4. Enough additional coursework, if needed, to raise the student's course load to 15 or 16 hours each semester. Basic courses in business, studio art, and computer sciences are especially recommended.

### **Third and Fourth Years**

- 1. Any remaining courses in the core curriculum and the prescribed work.
- 2. The remaining courses listed as major requirements, including advertising electives.
- Additional upper-division electives chosen to support the major. Advertising majors normally emphasize economics, government, history, English, sociology, psychology, marketing, or management.

## Bachelor of Science in Communication and Leadership

To be awarded the degree of Bachelor of Science in Communication and Leadership, the candidate must complete 120 semester hours of coursework and must fulfill the University's General Requirements (p. 20) for graduation, the Core Curriculum (p. 23) requirements, the college graduation requirements, the requirements and policies listed in Academic Policies and Procedures, and the requirements given in Prescribed Work, Major Requirements, and Special Requirements of the Major, below.

## **Core Curriculum**

All students must complete the University's Core Curriculum (p. 23). In some cases, a course required for the Bachelor of Science in Communication and Leadership may also be counted toward the core curriculum.

### **Prescribed Work**

- 1. Three semester hours in English or rhetoric and writing in addition to the courses required by the core curriculum.
- 2. Three courses with a writing flag; one course with a quantitative reasoning flag; one course with a global cultures flag; one course with a cultural diversity in the United States flag; one course with an ethics flag; and one course with an independent inquiry flag. The same course cannot be used to satisfy the global cultures and cultural diversity flags even if the course carries both flags. Courses that fulfill flag requirements are identified in the Course Schedule. They may also be used to fulfill other degree requirements.
- 3. Three semester hours of coursework in the Moody College of Communication dealing with the study of communication issues concerning at least one minority or non-dominant group within the United States. Courses that fulfill this requirement may also be used to fulfill other degree requirements. A complete list is available on

the college's Student Advising website before registration for each semester and summer session.

- 4. Students must satisfy a foreign language and culture requirement in one of the following ways: (a) Demonstrating intermediate proficiency in a single foreign language; (b) Taking two consecutive courses in one language and one approved culture course in a culture that is relevant to the language. A list of approved culture and language courses and combinations will be posted on the Student Advising website before registration for each semester and summer session. An extensive foreign language testing program is available at the University. Students with knowledge of a language are encouraged to take appropriate tests both to earn as much credit as possible and to be placed at the proper level for further study. Students should consult with an academic adviser for information on testing.
- 5. At least six semester hours of course work in the Moody College of Communication excluding communication courses used to meet the communication and leadership major requirements.
- 6. Thirty-six hours of coursework, as described in Major Requirements, below.
- 7. Enough additional coursework to make a total of 120 semester hours.

## **Major Requirements**

The major requires 36 hours of coursework across three designated areas, of which at least 15 hours must be upper-division:

- 1. **Communication Leadership.** Communication and Leadership 301, 321, 351, 371
- Communication Foundations. Twelve semester hours chosen from the following courses in the Moody College of Communication: Advertising 320, 332; Communication Studies 306M, 310K, 313M, 315M, 316L, 320, 321D, 322E, 332, 332K. 333, 335, 337, 338, 341, 353S, 372K; Journalism 331M, 358C
- Social Issues. Twelve semester hours chosen from the following: Advertising 334, 378 (Topic 26); Communication Studies 332D, 340K, 342K, 344K, 347K, 354, 372T; Communication Sciences and Disorders 378D; Journalism 336F, 313P, 338J, 341F, 341J, 346G, 348D, 351F, 355F; Radio-Television-Film 323C, 342 (Topic 8), 365 (Topic 13); Public Health 317; Social Work 310, 325; Public Affairs 325 (Topic 1); Applied Learning and Development 327; Women's and Gender Studies 340 (Topic 53); Government 351L or Core Texts and Ideas 325, Government 337M (Topic 7), 357M (Topic 8); Sociology 308K, 321G, 336D, 352, 369K.

## Special Requirements of the Major

A student may not earn both the Bachelor of Science in Communication and Leadership and the Bachelor of Science in Communication Studies.

### **Order and Choice of Work**

### **First Year**

- 1. The student must take three courses from the following group each semester:
  - a. Rhetoric and Writing 306.
  - b. Undergraduate Studies 302 or 303
  - c. Courses to be counted toward the American history, American and Texas government, social and behavioral sciences, mathematics, visual and performing arts, and science and technology requirements of the core curriculum.

- d. Courses in a foreign language.
- e. Courses that meet flag requirements.
- 2. Enough additional coursework to raise the student's course load to 15 or 16 hours each semester. Courses should be chosen with the guidance of a college adviser.

### Second Year

- 1. The student should take three courses from the following group each semester; four are recommended:
  - a. English 316L, 316M, 316N, or 316P and any three-semester-hour course in English or rhetoric and writing.
  - b. Courses to be counted toward the American history, American and Texas government, social and behavioral sciences, mathematics, visual and performing arts, and science and technology requirements of the core curriculum.
  - c. Courses in the foreign language, unless the language requirement has been fulfilled.
- 2. Communication and Leadership 301 and a course from Communication Foundations.
- 3. Two courses that meet flag requirements.
- 4. Enough additional coursework, if needed, to raise the student's course load to 15 or 16 hours each semester. Courses should be chosen with the guidance of a college academic adviser.

### **Third Year**

- 1. Two courses that meet flag requirements.
- 2. Any remaining courses in the core curriculum and the prescribed work.
- 3. Courses from the Communication Foundations and Social Issues areas to fulfill the major requirements. Courses should be chosen with the guidance of a college academic adviser.
- 4. Communication and Leadership 321 and 351, if the prerequisites have been met.
- 5. Upper-division electives chosen to support the major.

### **Fourth Year**

- 1. Communication and Leadership 371
- 2. Upper-division electives chosen to support the major.
- 3. Any remaining major requirements from the Communication Foundations and Social Issues areas. Courses should be chosen with the guidance of a college academic adviser.
- 4. Any remaining flag requirements.
- 5. Any remaining courses in the core curriculum and the prescribed work.

## Bachelor of Science in Communication Sciences and Disorders

To be awarded the degree of Bachelor of Science in Communication Sciences and Disorders, the candidate must complete 120 semester hours of coursework and must fulfill the University's General Requirements (p. 20) for graduation, the Core Curriculum (p. 23) requirements, the college graduation requirements, the requirements and policies listed in Academic Policies and Procedures, and the requirements given in Prescribed Work, Major Requirements, and Special Requirements of the Major, below.

## **Core Curriculum**

All students must complete the University's Core Curriculum (p. 23). In some cases, a course required for the Bachelor of Science in Communication Sciences and Disorders may also be counted toward the core curriculum.

### **Prescribed Work**

- 1. Three semester hours in English or rhetoric and writing in addition to the courses required by the core curriculum.
- 2. Three courses with a writing flag; one course with a quantitative reasoning flag; one course with a global cultures flag; one course with a cultural diversity in the United States flag; one course with an ethics flag; and one course with an independent inquiry flag. The same course cannot be used to satisfy the global cultures and cultural diversity flags even if the course carries both flags. Courses that fulfill flag requirements are identified in the Course Schedule. They may also be used to fulfill other degree requirements.
- 3. Three semester hours of coursework in the Moody College of Communication dealing with the study of communication issues concerning at least one minority or non-dominant group within the United States. Courses that fulfill this requirement may also be used to fulfill other degree requirements. A complete list is available on the college's Student Advising website before registration for each semester and summer session.
- 4. Students must satisfy a foreign language and culture requirement in one of the following ways: (a) Demonstrating intermediate proficiency in a single foreign language; (b) Taking two consecutive courses in one language and one approved culture course in a culture that is relevant to the language. A list of approved culture and language courses and combinations will be posted on the Student Advising website before registration for each semester and summer session. An extensive foreign language testing program is available at the University. Students with knowledge of a language are encouraged to take appropriate tests both to earn as much credit as possible and to be placed at the proper level for further study. Students should consult with an academic adviser for information on testing.
- 5. At least six semester hours of coursework must be taken in the Moody College of Communication but outside the Department of Communication Sciences and Disorders.
- 6. At least 35 (36 for students in education of the deaf/hearingimpaired) but no more than 48 semester hours of communication sciences and disorders, as described in Major Requirements, below.
- Three semester hours of coursework in introductory statistics. Courses that fulfill this requirement include Educational Psychology 308, 371; Statistics and Data Sciences 301, 302, 303, 304, 305, 306, 328M. Courses that fulfill this requirement may also be used to fulfill other degree, core curriculum, and flag requirements.
- 8. Enough additional coursework to make a total of 120 semester hours.

# Special Emphases in Communication Sciences and Disorders

Students majoring in communication sciences and disorders may specialize in speech/language pathology, audiology, or education of the deaf/hearing-impaired. After completing the necessary undergraduate coursework, they may seek the graduate degrees that are required for professional accreditation by the American Speech-Language-Hearing Association (for those in speech/language pathology and audiology) or the Council on Education of the Deaf (for those in education of the deaf/hearing-impaired). Students in speech/language pathology and audiology who wish to practice in Texas must be licensed by the Texas Department of State Health Services; those in education of the deaf/ hearing-impaired must be certified by the Texas State Board for Educator Certification.

## **Major Requirements**

Students specializing in speech/language pathology or audiology must complete at least 35 semester hours of coursework in communication sciences and disorders; those specializing in education of the deaf/ hearing-impaired must complete at least 36 hours. No more than 48 semester hours of coursework in communication sciences and disorders may be counted toward the degree. The course requirements for each track are as follows:

- 1. Speech/language pathology: Communication Sciences and Disorders 118L, 113P, 306K, 308K, 311K, 312, 313L, 315S, 341, 350, 367K, 371, and 373.
- Audiology: Communication Sciences and Disorders 118L, 113P, 306K, 308K, 311K, 312, 313L, 315S, 341, 350, 367K, 371, and 373.
- Education of the deaf/hearing-impaired: Communication Sciences and Disorders 118L,113P, 308K, 311K, 312, 313L, 331E, 341, 360M, 364, 367K, 373, and four hours of 175N.

## Order and Choice of Work

### **First Year**

- 1. The student must take three courses from the following group each semester.
  - a. Rhetoric and Writing 306.
  - b. Courses to be counted toward the American history, American and Texas government, social and behavioral sciences, mathematics, visual and performing arts, and science and technology requirements of the core curriculum
  - c. Courses in a foreign language. Students in education of the deaf/hearing-impaired are encouraged to take American Sign Language.
  - d. Courses that meet flag requirements.
- 2. Enough additional coursework to raise the student's course load to 15 or 16 hours each semester. Courses should be chosen with the guidance of a college adviser.

### Second Year

- 1. The student must take three courses from the following group each semester; four are recommended:
  - a. English 316L, 316M, 316N, or 316P, and any three-semester-hour course in English or rhetoric and writing.
  - b. Courses to be counted toward the American history, American and Texas government, social and behavioral sciences, mathematics, visual and performing arts, and science and technology requirements of the core curriculum.
  - c. Courses in the foreign language, unless the language requirement has been fulfilled.
  - d. Courses that meet flag requirements.
- Communication Sciences and Disorders 306K (for students in speech/language pathology or audiology) or 308K (for students in education of the deaf/hearing-impaired) and other lower-division courses in communication sciences and disorders recommended by the student's adviser.
- 3. Enough additional coursework, if needed, to raise the student's course load to 15 or 16 hours each semester.

### Third and Fourth Years

- 1. Any remaining courses in the core curriculum and the prescribed work.
- 2. The remaining courses listed as major requirements.
- 3. Enough additional coursework to raise the student's course load to 15 or 16 hours each semester.

## Bachelor of Science in Communication Studies

To be awarded the degree of Bachelor of Science in Communication Studies, the candidate must complete 120 semester hours of coursework and must fulfill the University's General Requirements (p. 20) for graduation, the Core Curriculum (p. 23) requirements, the college graduation requirements, the requirements and policies listed in Academic Policies and Procedures, and the requirements given in Prescribed Work, Major Requirements, and Special Requirements of the Major, below.

## **Core Curriculum**

All students must complete the University's Core Curriculum (p. 23).

In some cases, a course required for the Bachelor of Science in Communication Studies may also be counted toward the core curriculum.

## **Prescribed Work**

- 1. Three semester hours in English or rhetoric and writing in addition to the courses required by the core curriculum.
- 2. Three courses with a writing flag; one course with a quantitative reasoning flag; one course with a global cultures flag; one course with a cultural diversity in the United States flag; one course with an ethics flag; and one course with an independent inquiry flag. The same course cannot be used to satisfy the global cultures and cultural diversity flags even if the course carries both flags. Courses that fulfill flag requirements are identified in the Course Schedule. They may also be used to fulfill other degree requirements.
- 3. Three semester hours of coursework in the Moody College of Communication dealing with the study of communication issues concerning at least one minority or non-dominant group within the United States. Courses that fulfill this requirement may also be used to fulfill other degree requirements. A complete list is available on the college's Student Advising website before registration for each semester and summer session.
- 4. Students must satisfy a foreign language and culture requirement in one of the following ways: (a) Demonstrating intermediate proficiency in a single foreign language; (b) Taking two consecutive courses in one language and one approved culture course in a culture that is relevant to the language. A list of approved culture and language courses and combinations will be posted on the Student Advising website before registration for each semester and summer session. An extensive foreign language testing program is available at the University. Students with knowledge of a language are encouraged to take appropriate tests both to earn as much credit as possible and to be placed at the proper level for further study. Students should consult with an academic adviser for information on testing.
- 5. At least six semester hours of coursework must be taken in the Moody College of Communication but outside the Department of Communication Studies.

- 6. At least 36 but no more than 48 semester hours of communication studies as described in Major Requirements, below.
- 7. Enough additional coursework to make a total of 120 semester hours.

### **Major Requirements**

At least 36 but no more than 48 semester hours of communication studies of which at least 18 hours must be in upper-division coursework. Each student must complete one of the following tracks:

### **Corporate Communication**

- 1. Communication Studies 306M, 313M, and 332K.
- Three semester hours chosen from the following Methods courses: Communication Studies 314L, 348, 348K, 349M, 350C, 350M, 357, 358, 359C, 377K, or 378K. The course selected may not be counted toward any additional communication studies major requirement.
- Three semester hours chosen from the following Career Preparation courses: Communication Studies 301 (any topic), 322E, 342K, 345G, 364M, 370K. The course selected may not be counted toward any additional communication studies major requirement.
- Nine semester hours chosen from the following courses: Communication Studies 310K, 337, 339L, 341, 350C, 350M, 353C, 353S, 370K, 372K, and 372T.
- 5. Twelve additional semester hours of communication studies.

### Interpersonal Communication

- 1. Communication Studies 306M, 315M, and 332K.
- Three semester hours chosen from the following Methods courses: Communication Studies 314L, 348, 348K, 349M, 350C, 350M, 357, 358, 359C, 377K, or 378K. The course selected may not be counted toward any additional communication studies major requirement.
- Three semester hours chosen from the following Career Preparation courses: Communication Studies 301 (any topic), 322E, 342K, 345G, 364M, 370K. The course selected may not be counted toward any additional communication studies major requirement.
- Nine semester hours chosen from the following courses: Communication Studies 314L, 330, 334K, 344K, 354, 355K, 355T, 357, 358, 370K, 371D, and 371K.
- 5. Twelve additional semester hours of communication studies.

### **Political Communication**

- 1. Communication Studies 306M, Communication Studies 317C, and 332K.
- Three semester hours chosen from the following Methods courses: Communication Studies
   314L, 348, 348K, 349M, 350C, 350M, 357, 358, 359C, 377K, or 378K. The course selected may not be counted toward any additional communication studies major requirement.
- Three semester hours chosen from the following Career Preparation courses: Communication Studies 301 (any topic), 322E, 342K, 345G, 364M, 370K. The course selected may not

be counted toward any additional communication studies major requirement.

- Nine semester hours chosen from the following courses: Communication Studies 320, 322E, 332, 333, 338L, 340K, 342C, 342K, 345, 345G, 345P, 345V, 364K, 370K, 372D, and 373D.
- 5. Twelve additional semester hours of communication studies.

## Special Requirements of the Major

A student majoring in communication studies may not register for more than nine semester hours of communication studies in one semester.

A student may not earn both the Bachelor of Science in Communication and Leadership and the Bachelor of Science in Communication Studies.

## Order and Choice of Work

### **First Year**

- 1. The student must take three courses from the following group each semester.
  - a. Rhetoric and Writing 306.
  - b. Courses to be counted toward the American history, American and Texas government, social and behavioral sciences, mathematics, visual and performing arts, and science and technology requirements of the core curriculum.
  - c. Courses in a foreign language.
  - d. Courses that meet flag requirements.
  - e. Undergraduate Studies 302 or 303.
- 2. Enough additional coursework to raise the student's course load to 15 or 16 hours each semester. Courses should be chosen with the guidance of a college adviser.

### Second Year

- 1. The student must take three courses from the following group each semester; four are recommended:
  - a. English 316L, 316M, 316N, or 316P, and any three-semester-hour course in English or rhetoric and writing.
  - b. Courses to be counted toward the American history, American and Texas government, social and behavioral sciences, mathematics, visual and performing arts, and science and technology requirements of the core curriculum.
  - c. Courses in the foreign language, unless the language requirement has been fulfilled.
  - d. Courses that meet flag requirements.
- 2. Lower-division communication studies courses recommended by the student's adviser.
- 3. Enough additional coursework, if needed, to raise the student's course load to 15 or 16 hours each semester.

### Third and Fourth Years

- 1. Any remaining courses in the core curriculum and the prescribed work.
- 2. The remaining courses listed as major requirements. Students should note that some upper-division courses have a series of prerequisite courses that takes up to three semesters to complete.
- 3. Enough additional coursework to raise the student's course load to 15 or 16 hours each semester.

## **Bachelor of Journalism**

To be awarded the degree of Bachelor of Journalism, the candidate must complete 120 semester hours of coursework and must fulfill the University's General Requirements (p. 20) for graduation, the Core Curriculum (p. 23) requirements, the college graduation requirements, the requirements and policies listed in Academic Policies and Procedures, and the requirements given in Prescribed Work, Major Requirements, and Special Requirements of the Major, below.

## **Core Curriculum**

All students must complete the University's Core Curriculum (p. 23). In some cases, a course required for the Bachelor of Journalism may also be counted toward the core curriculum

### **Prescribed Work**

- 1. Three semester hours in English or rhetoric and writing in addition to the courses required by the core curriculum.
- 2. Three courses with a writing flag; one course with a quantitative reasoning flag; one course with a global cultures flag; one course with a cultural diversity in the United States flag; one course with an ethics flag; and one course with an independent inquiry flag. The same course cannot be used to satisfy the global cultures and cultural diversity flags even if the course carries both flags. Courses that fulfill flag requirements are identified in the Course Schedule (https://registrar.utexas.edu/schedules). They may also be used to fulfill other degree requirements.
- 3. Three semester hours of coursework in the Moody College of Communication dealing with the study of communication issues concerning at least one minority or non-dominant group within the United States. Courses that fulfill this requirement may also be used to fulfill other degree requirements. A complete list is available on the college's Student Advising (https://moody.utexas.edu/students/ undergraduate/academic-advising) website before registration for each semester and summer session.
- 4. Students must satisfy a foreign language and culture requirement in one of the following ways: (a) Demonstrating intermediate proficiency in a single foreign language; (b) Taking two consecutive courses in one language and one approved culture course in a culture that is relevant to the language. A list of approved culture and language courses and combinations will be posted on the Student Advising website before registration for each semester and summer session. An extensive foreign language testing program is available at the University. Students with knowledge of a language are encouraged to take appropriate tests both to earn as much credit as possible and to be placed at the proper level for further study. Students should consult with an academic adviser for information on testing.
- At least six semester hours of coursework must be taken in the Moody College of Communication but outside the School of Journalism.
- 6. Thirty-six semester hours of journalism coursework, as described in Major Requirements, below.
- 7. Enough additional coursework to make a total of 120 semester hours.

## **Major Requirements**

Journalism students must complete 36 semester hours in journalism, and no more than 36 journalism hours may be counted toward the degree. Students must complete the following coursework:

Level I, Foundations (6 hours): Journalism 301F and 302F

Level II, Applications (6 hours): Journalism 310F and 311F

Level III, Specialized Skills and Concepts (18 hours):

- At least nine semester hours in Skills courses to be chosen from: Journalism 318P, 320F, 321F, 322F, 322J, 323F, 324F, 325F, 326F, 327D, 328S, 330C, 330G, 331D, 331G, 331M, 332D, 332G, 332J, 333G, 333J, 334F, 334G, 334J, 335, 335D, 335F, 335G, 335J, 336D, 336F, 336J, 337F, 337G, 337J, 338F, 339F, 339M, 339T (Topics 1, 2, 3 and 4), 340J, 346F. Students should consult the School of Journalism for the most updated course list.
- Journalism 350F (required) and at least three additional semester hours in Concept courses to be chosen from: Journalism 338J, 340F, 340G, 341F, 341G, 341J, 342F, 342G, 342J, 343F, 343G, 344F, 344G, 345G, 346G, 347F, 347G, 348D, 348F, 348G, 349F, 349T, 351F, 352F, 353F, 354F, 355F, 358N, 358P Students should consult the School of Journalism for the most updated course list.
- Three additional semester hours in Skills or Concepts.

**Level IV**, *Professional Practices* (6 hours): Six hours chosen from Journalism 360F, 160G, 361F, 362F, 363D, 363F, 363S, 363V, 363W. Students should consult the School of Journalism for the most updated course list.

## Special Requirements of the Major

Students are required to take Journalism 302F, 310F, and 311F in residence.

Journalism 310F and 311F require a grade of at least *B*-; students who do not fulfill this requirement cannot register for upper-division journalism courses.

Courses in Levels II – IV have prerequisites appropriate to their skill level. Prerequisites may include testing, an interview, or other procedures. Information about these additional requirements is available from the School of Journalism adviser.

The student must complete at least 84 semester hours outside journalism. At least 65 hours must be in liberal arts and natural sciences.

A student majoring in journalism may not register for more than nine semester hours in journalism in one semester or summer session. The director or associate director may make exceptions to this rule for students who need additional journalism courses in order to graduate on time

## Order and Choice of Work

### First Year

- 1. The student must take three courses from the following group each semester:
  - a. Rhetoric and Writing 306
  - b. Courses to be counted toward the American history, American and Texas government, social and behavioral sciences, mathematics, visual and performing arts, and science and technology requirements of the core curriculum.
  - c. Courses in a foreign language.
- 2. Journalism 301F and 302F.
- 3. Students who plan to take advanced photojournalism courses are encouraged to take Communication 316 in their first or second semester as part of their required six hours of coursework in communication but outside of journalism.
- 4. Two courses that meet flag requirements.

5. Enough additional coursework to raise the student's course load to 12 or 16 hours each semester. Courses should be chosen with the guidance of a college academic adviser.

### Second Year

- 1. The student should take three courses from the following group each semester; four are recommended:
  - a. English 316L, 316M, 316N, or 316P and any three-semester-hour course in English or rhetoric and writing.
  - b. Courses to be counted toward the American history, American and Texas government, social and behavioral sciences, mathematics, visual and performing arts, and science and technology requirements of the core curriculum.
  - c. Courses in the foreign language, unless the language requirement has been fulfilled.
- 2. Journalism 310F and 311F and additional coursework to fulfill the major requirements.
- 3. Two courses that meet flag requirements.
- 4. Enough additional coursework, if needed, to raise the student's course load to 15 or 16 hours each semester. Courses should be chosen with the guidance of a college academic adviser.

### **Third Year**

- 1. Two courses that meet flag requirements.
- 2. Any remaining courses in the core curriculum and the prescribed work.
- 3. Journalism Level III and IV coursework to fulfill the major requirements. Courses should be chosen with the guidance of a college academic adviser.
- 4. Upper-division electives chosen to support the major.

### Fourth Year

- 1. Upper-division electives chosen to support the major.
- 2. Any remaining major requirements from Levels III and IV. Courses should be chosen with the guidance of a college academic adviser.
- 3. Any remaining flag requirements.
- 4. Any remaining courses in the core curriculum and the prescribed work.

# Bachelor of Science in Public Relations

To be awarded the degree of Bachelor of Science in Public Relations, the candidate must complete 120 semester hours of coursework and must fulfill the University's General Requirements (p. 20) for graduation and the Core Curriculum (p. 23) requirements, the college graduation requirements, the requirements and policies listed in Academic Policies and Procedures, and the requirements given in Prescribed Work, Major Requirements, and Special Requirements of the Major, below.

## **Core Curriculum**

All students must complete the University's Core Curriculum (p. 23). In some cases, a course required for the Bachelor of Science in Public Relations may also be counted toward the core curriculum.

## **Prescribed Work**

- 1. Rhetoric and Writing 309K, or 309S, or 310 in addition to the courses required by the Core Curriculum.
- 2. Three courses with a writing flag; one course with a quantitative reasoning flag; one course with a global cultures flag; one course

with a cultural diversity in the United States flag; one course with an ethics flag; and one course with an independent inquiry flag. The same course cannot be used to satisfy the global cultures and cultural diversity flags even if the course carries both flags. Courses that fulfill flag requirements are identified in the Course Schedule. They may also be used to fulfill other degree requirements.

- 3. Three semester hours of coursework in the Moody College of Communication dealing with the study of communication issues concerning at least one minority or non-dominant group within the United States. Courses that fulfill this requirement may also be used to fulfill other degree requirements. A complete list is available on the college's Student Advising website before registration for each semester and summer session.
- 4. Students must satisfy a foreign language and culture requirement in one of the following ways: (a) Demonstrating intermediate proficiency in a single foreign language; (b) Taking two consecutive courses in one language and one approved culture course in a culture that is relevant to the language. A list of approved culture and language courses and combinations will be posted on the Student Advising website before registration for each semester and summer session. An extensive foreign language testing program is available at the University. Students with knowledge of a language are encouraged to take appropriate tests both to earn as much credit as possible and to be placed at the proper level for further study. Students should consult with an academic adviser for information on testing.
- 5. At least six semester hours of coursework must be taken in the Moody College of Communication but outside the Stan Richards School of Advertising & Public Relations. Journalism 317 cannot be used to satisfy this requirement.
- 6. Twelve hours of coursework in business, including Marketing 320F (337 for students pursuing an additional major in business). At least six of the 12 hours must be upper-division.
- 7. Journalism 317.
- 8. At least 36, but no more than 42 semester hours of advertising and public relations, as described in Major Requirements, below
- 9. Enough additional coursework to make a total of 120 semester hours

## **Major Requirements**

At least 36 but no more than 42 semester hours of coursework, of which at least 24 hours must be upper-division. The following courses are required: Advertising 318J, 344K, 345J; Public Relations 309, 348, 350, 352, 353, 367, 377K, and six additional hours in public relations or advertising.

## Special Requirements of the Major

The student must complete Advertising 318J and Public Relations 309, 367 and 377K in residence.

To enroll in upper-division courses in the Stan Richards School, a student must have completed Advertising 318J with a grade of at least B. Students may enroll in Advertising 318J no more than twice.

Students who wish to count more than four hours of internship credit toward their degree must obtain approval from the Stan Richards School in advance if these additional hours will cause the student to exceed the maximum of 42 hours that a student may take in the Stan Richards School.

Any internship hours beyond four may not be counted toward the 36 required hours in the Stan Richards School.

A student may not earn both the Bachelor of Science in Advertising and the Bachelor of Science in Public Relations.

## **The Consent Procedure**

Some courses in the Stan Richards School of Advertising & Public Relations require that consent of the instructor must be received prior to registering. To be able to register for such a course, a student must first ask for and receive the instructor's consent. The student may be invited to an interview with the instructor or may be asked to provide supporting materials, such as an application or an essay. The student is responsible for knowing the deadline to apply. Consent forms are available from the student's adviser and in the Stan Richards School of Advertising & Public Relations.

Some students may wish to apply to one of two competitive elective sequences; these are the *creative* or *media* sequences. These sequences require consent to enroll.

## Order and Choice of Work

### First Year

- 1. The student must take three courses from the following group each semester.
  - a. Rhetoric and Writing 306
  - b. Courses to be counted toward the American history, American and Texas government, social and behavioral sciences, mathematics, visual and performing arts, and science and technology requirements of the core curriculum.
  - c. Courses in a foreign language.
  - d. Courses that meet flag requirements.
- 2. Additional coursework to raise the student's course load to 15 or 16 hours each semester. Courses should be chosen with the guidance of a college adviser.

### Second Year

- 1. The student must take three courses from the following group each semester; four are recommended:
  - a. Rhetoric and Writing 306; English 316L, 316M, 316N, or 316P; and Rhetoric and Writing 309K, 309S, or 310.
  - b. Courses to be counted toward the American history, American and Texas government, social and behavioral sciences, mathematics, visual and performing arts, and science and technology requirements of the core curriculum.
  - c. Courses in the foreign language, unless the language requirement has been fulfilled.
  - d. Courses that meet flag requirements.
- 2. Advertising 318J and Journalism 317
- 3. Public Relations 309
- 4. Enough additional coursework, if needed, to raise the student's course load to 15 or 16 hours each semester. Basic courses in writing are especially recommended.

### **Third Year**

- 1. Any remaining courses in the core curriculum and the prescribed work.
- 2. Public Relations 348, Advertising 344K, 345J, Marketing 320F, and additional coursework to fulfill the major requirements.
- Upper-division electives chosen to support the major. Public relations majors normally emphasize writing courses, such as those in English, journalism, and liberal arts; public speaking courses, such

as those in communication studies; psychology; marketing; and/or management.

### Fourth Year

- 1. The remaining courses listed as major requirements.
- 2. Upper-division electives chosen to support the major, including advertising and public relations electives.

## Bachelor of Science in Radio-Television-Film

To be awarded the degree of Bachelor of Science in Radio-Television-Film, the candidate must complete 120 semester hours of coursework and must fulfill the University's General Requirements (p. 20) for graduation and the Core Curriculum (p. 23) requirements, the college graduation requirements, the requirements and policies listed in Academic Policies and Procedures, and the requirements given in Prescribed Work, Major Requirements, and Special Requirements of the Major, below.

## **Core Curriculum**

All students must complete the University's Core Curriculum (p. 23). In some cases, a course required for the Bachelor of Science in Radio-Television-Film may also be counted toward the core curriculum.

### **Prescribed Work**

- 1. Three semester hours in English or rhetoric and writing in addition to the courses required by the core curriculum.
- 2. Three courses with a writing flag; one course with a quantitative reasoning flag; one course with a global cultures flag; one course with a cultural diversity in the United States flag; one course with an ethics flag; and one course with an independent inquiry flag. The same course cannot be used to satisfy the global cultures and cultural diversity flags even if the course carries both flags. Courses that fulfill flag requirements are identified in the Course Schedule. They may also be used to fulfill other degree requirements.
- 3. Three semester hours of coursework in the Moody College of Communication dealing with the study of communication issues concerning at least one minority or non-dominant group within the United States. Courses that fulfill this requirement may also be used to fulfill other degree requirements. A complete list is available on the college's Student Advising website before registration for each semester and summer session.
- 4. Students must satisfy a foreign language and culture requirement in one of the following ways: (a) Demonstrating intermediate proficiency in a single foreign language; (b) Taking two consecutive courses in one language and one approved culture course in a culture that is relevant to the language. A list of approved culture and language courses and combinations will be posted on the Student Advising website before registration for each semester and summer session. An extensive foreign language testing program is available at the University. Students with knowledge of a language are encouraged to take appropriate tests both to earn as much credit as possible and to be placed at the proper level for further study. Students should consult with an academic adviser for information on testing.
- 5. At least six semester hours of coursework must be taken in the Moody College of Communication but outside the Department of Radio-Television-Film.
- 6. At least 36 but no more than 48 semester hours of radio-televisionfilm as described in Major Requirements, below.

7. Enough additional coursework to make a total of 120 semester hours.

## **Major Requirements**

At least 36 but no more than 48 semester hours of radio-television-film, of which at least 21 hours must be upper-division. All students must take Radio-Television-Film 307, 308, 317, and 318; 9 hours chosen from the following: Radio-Television-Film 321C, 321D, 322D, 323C, 324C, 326C, 328C, 330K, 331K, 331N, 331N, 331P, 335, 342, 342S, 345, 345C, 347C, 347P, 352, 359, 359S, 365, 365C, 365D, 368S (Topic 2), 370, 377H; and 15 additional hours of radio-television-film.

## Special Requirements of the Major

To enroll in some upper-division radio-television-film courses, the student must earn specific grades in prerequisite courses. In addition, enrollment in some upper-division courses requires the consent of the instructor. Course prerequisites and the departmental consent process are described on the Department of Radio-Television-Film website.

It is not recommended that a student majoring in radio-television-film register for more than nine semester hours in radio-television-film in one long-session semester or more than six semester hours in a summer session.

## Order and Choice of Work

### **First Year**

- 1. The student may take three courses from the following group each semester.
  - a. Rhetoric and Writing 306.
  - b. Courses to be counted toward the American history, American and Texas government, social and behavioral science, visual and performing arts, mathematics, and science and technology requirements of the core curriculum.
  - c. Courses in a foreign language.
  - d. Courses that meet flag requirements.
- 2. Radio-Television-Film 307 and 308.
- 3. Enough additional coursework to raise the student's course load to 15 or 16 hours each semester. Courses should be chosen with the guidance of a college adviser.

### Second Year

- 1. The student must take three courses from the following group each semester; four are recommended:
  - a. English 316L, 316M, 316N, or 316P, and any three-semester-hour course in English or rhetoric and writing.
  - b. Courses to be counted toward the American history, American and Texas government, social and behavioral science, visual and performing arts, mathematics, and science and technology requirements of the core curriculum.
  - c. Courses in the foreign language, unless the language requirement has been fulfilled.
  - d. Courses that meet the flag requirements.
- 2. Radio-Television-Film 317 and 318.
- 3. Enough additional coursework, if needed, to raise the student's course load to 15 or 16 hours each semester.

### **Third and Fourth Years**

1. Any remaining courses in the core curriculum and the prescribed work.

- 2. Three upper-division radio-television-film courses to be counted toward the Media Studies portion of the major requirements.
- 3. Fifteen additional semester hours of coursework in radio-televisionfilm, of which 12 hours must be upper-division.
- 4. Enough additional coursework to meet overall university-wide degree requirements.

## Minor and Certificate Programs

### Policy for Moody College Students

While a minor is not required as part of any communication degree program, the student may choose to complete a minor in any field to which he/she gains entry. A student may declare only one minor or certificate to supplement his/her Moody major(s); exceptions must be approved by the dean. Moody students must declare their minor/ certificate intentions before they have completed 65% of their degree requirements, as indicated on the Interactive Degree Audit (IDA); exceptions must be approved by the dean.

The transcript-recognized undergraduate academic minor must be completed in conjunction with an undergraduate degree at The University of Texas at Austin. For more information regarding the requirements for achieving a minor or certificate, including a comprehensive list of minors and certificates, please visit the Minors and Certificate Programs (p. 13) section of the *Undergraduate Catalog*.

## **Minors Offered**

### **Communication and Social Change**

Students in this minor will learn how communication, as an interdisciplinary approach, can be used to build and assess strategic approaches in campaigns, advocacy, and social movements. This concentration will allow students to focus on areas of substantive interest through specialized guidance, course participation, and experiential learning.

The minor is open to all undergraduate majors at The University of Texas at Austin and requires 18 semester hours of coursework. Nine hours must be taken at the upper-division level, and at least nine hours must be taken in residence. If demand exceeds space available the Moody College reserves the right to select students based on a review of their academic record.

The requirements for the minor are as follows:

ADV 336	Multicultural Issues in Advertising and Public Relations (any topic)	
CMS 340K	Communication and Social Change	
CMS 342K	Political Communication	
CMS 354	Conflict Resolution	
J 315R	Contemporary Representation in Media	
J 341 J	Minorities and the Media	
J 342G	Reporting the World: A Critical Examination of the United States News Media	
J 348D	Gender and the News	
J 351F	Journalism, Society, and the Citizen Journalist	
J 358S	Communicating Social Change	
RTF 301S	Social Activism in Film	
RTF 323C	Screening Race	
RTF 342	Topics in Global Media (Topic 8: Development Communication and Social Change)	
RTF 365	Topics in Media and Society (Topic 13: Activist Media)	
Please Note:		
Students must petition th	ne faculty committee in advance if	

Students must petition the faculty committee in advance if they wish to substitute another course to use toward any requirement.

## **Communication Studies Minor**

The minor in Communication Studies affords undergraduate students across the University the opportunity to increase their skills in communication, particularly in the areas of organizational, interpersonal, and rhetorical communication. In addition, students study the foundations of public speaking, verbal and non-verbal communication, and intercultural communication as well as learn techniques to approach ethical dilemmas within the field of communication.

The Department of Communication Studies reserves the right to limit the number of students accepted as Communication Studies Minors. Nine hours of coursework must be taken in residence. All communication studies minor coursework must have a grade of at least *C*-; if the course is offered on the pass/fail basis only, the student must earn the symbol *CR*. Students must earn a 2.0 minimum GPA in courses counting toward the minor. This minor is not available to students with a major in the Moody College.

The course requirements are as follows:

Requirements		Hours	
CMS 306M	Professional Communication Skills		3
CMS 315M	Interpersonal Communication Theory		3
Twelve additional hours f	from the following list:		12
CMS 301	Topics in Communication Studies (any topic)		
CMS 320	Advanced Presentation Skills		
CMS 322E	Communication Ethics		
CMS 323R	Rhetoric: East and West		
CMS 330	Interpersonal Health Communication		
CMS 332	Argumentation and Advocacy		
CMS 332K	Theories of Persuasion		

CMS 333	Case Studies in Argumentation
CMS 334K	Nonverbal Communication
CMS 335	Strategic Sales and Event Planning
CMS 337	Building Sales Relationships
CMS 340K	Communication and Social Change
CMS 341	Digital Communications
CMS 342K	Political Communication
CMS 344K	Lying and Deception
CMS 345P	Communication and Public Opinion
CMS 347K	Rhetoric of Popular Culture
CMS 348K	Visual Media and Interaction
CMS 349M	Advanced Analysis of Popular Culture
CMS 353S	Social Media and Organizations
CMS 354	Conflict Resolution
CMS 355K	Intercultural Communication
CMS 357	Family Communication
CMS 358	Communication and Personal Relationships
CMS 359	Language, Culture, and Communication of Hip-Hop
CMS 164M	Pre-Graduate School Mentorship
CMS 264M	Pre-Graduate School Mentorship
CMS 364M	Pre-Graduate School Mentorship
CMS 366	Rhetoric, Love, and Democracy
CMS 366C	Celebrity Culture
CMS 366F	Rhetoric of Film
CMS 366M	Rhetoric and Popular Music
CMS 366R	Religious Communication and Paranormalism
CMS 371K	Practicum in Conflict Mediation
CMS 372T	Time Matters
CMS 372D	The Politics of National Memory
CMS 373D	Advocacy and Politics

## **Digital Media Minor**

The Digital Media Minor in the Department of Radio-Television-Film (RTF) provides a selection of courses that will cultivate students' understandings and abilities in a general area recognized as digital media. The courses in this minor emphasize a) knowledge of how communication technologies have developed historically; b) their social and cultural functions and dynamics; c) how specific communication and cultural industries operate and evolve in a global environment; and d) how elements of art and design figure into expressions of and interactions with digital media. Students completing this minor will gain advanced skills in digital media domains including social media and new media industries. They will also examine ethical issues developing around the new media environment.

This program is open only to students who are not majoring in RTF. Applicants must have a 2.5 cumulative grade point average. The Radio-Television-Film Department reserves the right to limit the number of students accepted as digital media minors. If demand exceeds space available, students will be selected based on a review of a student's academic record. Acceptance into the minor does not come with preference or guarantee of a seat in any RTF course.

The minor requires 15 hours of coursework, and at least nine hours completed in residence. All courses must be taken for a letter grade, unless the course is only offered on a pass/fail basis. Only courses with a *C*- (or *CR*) or better will be counted toward the minor. Students must petition to the faculty committee in advance if they wish to substitute another internship course in place of Radio-Television-Film 330M.

Students must take the following coursework:

Requirements		Hours	
RTF 326C	Tech Culture		3
Three hours from the Ind digital media courses:	ustries and Practices cluster of		3
RTF 331N	The Information Society (Topic 1: Information Society and Beyond)		
RTF 347P	The Business of Hollywood		
RTF 359	Studies in Media and Culture (Topic 7: Race and Digital Media Culture)		
RTF 365	Topics in Media and Society (Topic 9: Media Industries and Entrepreneurship)		
RTF 365	Topics in Media and Society (Topic 10: Globalization and Social Media)		
RTF 365C	Media and Policy (Topic 1: Media, Communication Law, and Ethics)		
Three hours from the Art courses:	and Design cluster of digital media		3
RTF 327C	Digital Remix Cultures		
RTF 331M	New Communication Technologies (Topic 1: Digital Media and Design)		
RTF 331P	Topics in New Communication Technologies (Topic 4: Video Game Culture and Criticism)		
RTF 345C	Experimental Media and the Art of Disruption		
Three hours from the Cul digital media courses:	tures and Social Change cluster of		3
RTF 331P	Topics in New Communication Technologies (Topic 3: Internet Cultures)		
RTF 359	Studies in Media and Culture (Topic 5: Social Media: Growth, Uses, and Impacts)		
RTF 365D	Media Literacy (Topic 3: Media Literacy and Civic Engagement)		
Three additional hours in	a related area:		3
RTF 330M	Internship in Digital Media		
RTF 329C	Digital Media Production		
RTF 344M	Special Applications of Digital Media Production (Topic 5: Writing for Interactive Games and Media)		
RTF 351C	Introduction to Two-Dimensional Animation		

## **Global Communication Minor**

The Global Communication Minor is designed to give students a global perspective of the communication industries. Students will learn about the essential role of communication in our increasingly interconnected and multicultural society.

This program is only open to students in the Moody College of Communication. At least nine hours must be completed in residence and at least six hours must be taken at the upper-division level. Students must earn a grade of at least a *C*- (or *CR* for courses offered only on a pass/fail basis) in each course counted toward fulfillment of the minor requirements.

The minor requires 15 semester hours of coursework. The requirements are:

Requirements		Hours	
COM 323	Communication Internship (Topic 3: Global Experience) <sup>1</sup>		3
Twelve hours of coursew	ork selected from the list below: <sup>2</sup>		12
ADV 334	International Advertising		
CMS 314L	Language, Communication, and Culture		
CMS 323R	Rhetoric: East and West		
CMS 355K	Intercultural Communication		
J 328S	Reporting en Espanol		
J 340F	Covering the Global Economy		
J 340G	Reporting Asia: A Foreign Correspondent's Framework		
J 340J	Documentary Tradition of Latin America		
J 342G	Reporting the World: A Critical Examination of the United States News Media		
J 345G	Human Rights Journalism		
J 346G	Domestic Issues and Global Perspective		
J 347F	Reporting Latin America		
RTF 324C	Introduction to Global Media		
RTF 342	Topics in Global Media (Topic 1: National Media Systems)		
RTF 342	Topics in Global Media (Topic 2: Comparative Media Systems)		
RTF 342	Topics in Global Media (Topic 7: Global Media Systems)		
RTF 342	Topics in Global Media (Topic 8: Development Communication and Social Change)		
RTF 352	Global Media and Area Studies (Topic 1: Media and the Middle East)		
RTF 365	Topics in Media and Society (Topic 8: Migration and Media)		
RTF 365	Topics in Media and Society (Topic 10: Globalization and Social Media)		
Please Note:			

Students should consult the Student Advising Office for additional information about the coursework that meets minor requirements.

1. Or an approved substitution of study abroad coursework or internship coursework done while studying abroad.

2. Three hours may be substituted with experiential learning courses to be petitioned by the student for credit.

## **Health Communication Minor**

The Health Communication Minor is intended for any University student interested in advanced study of health communication. Students completing the minor program will understand how health communication professionals think and be prepared for careers in population health, medical, clinic management, and communication agencies, among others. More information about the Health Communication Minor is available at https://moody.utexas.edu/ students/minors/minor-health-communication.

This program is open to all University of Texas at Austin students. The Moody College reserves the right to limit the number of students accepted into this minor by instituting a competitive application process. Applicants may be judged on such factors as grade point average, prior coursework taken, prior experience in the field, and response to essay prompts.

The minor program requires 16 semester hours of coursework including nine hours to be completed in residence. Students must fulfill the following requirements:

Requirements	Ηοι	ırs
COM 102	Introduction to Health Communication	1
Interpersonal Communic		3
CMS 330	Interpersonal Health	Ū
	Communication	
CMS 332	Argumentation and Advocacy	
CMS 332K	Theories of Persuasion	
CMS 344K	Lying and Deception	
CMS 358	Communication and Personal Relationships	
HDF 337	Personal Relationships	
HDF 466	Guidance in Adult-Child Relationships	
or WGS 466	Guidance in Adult-Child Relationships	
PHM 390C	Communication Skills for Health	
	Professionals	
Organizational Communi		3
CMS 341	Digital Communications	
CMS 353S	Social Media and Organizations	
CMS 357	Family Communication	
HDF 313	Child Development	
or WGS 313	Child Development	
HDF 347	Socioeconomic Problems of Families	
HDF 378L	Theories of Child and Family Development	
N 310	Communication in Health Care Settings	
S W 360K	Current Social Work Topics (Topic	
	4: Practice with Abused and	
	Neglected Children and their Families)	
WGS 301	Introductory Topics in Women's and	
	Gender Studies (Topic 4: Family	
	Relationships)	
or HDF 304	Family Relationships	
WGS 301	Introductory Topics in Women's and Gender Studies (Topic 19: Diversity in American Families)	
WGS 301	Introductory Topics in Women's	
	and Gender Studies (Topic 23:	
	Romantic Relationships and Family	
	Formation)	
Population/Mass Media:		3

ADV 319	Psychology of Advertising
ADV 327	Account Planning
AMS 370	Seminar in American Culture (Topic 1: American Cultural History of Alcohol/Drugs)
BIO 361L	Clinical Bacteriology Laboratory
CH 107	Conference Course
CMS 372T	Time Matters
ECO 325K	Health Economics
EDP 350G	Adolescent Development
EDP 350L	Human Sexuality
EDP 371	Introduction to Statistics
GOV 370L	Topics in American Government and Politics (Topic 23: Politics of Healthcare)
GRG 356	Topics in Environmental Geography (Topic 1: Children's Environmental Health)
HIS 350R	Undergraduate Seminar in United States History (Topic 5: American Cultural History of Alcohol/Drugs)
H S 301	Introduction to Health and Society
or SOC 308S	Introduction to Health and Society
HDF 313	Child Development
or WGS 313	Child Development
HDF 371	Adolescent Development in Context
HDF 378K	Advanced Child and Family Development (Topic 6: Into to Early Childhood Interventions)
HED 329K	Child and Adolescent Health
HED 335	Theories of Substance Use and Abuse
HED 343	Foundations of Epidemiology
HED 360	Adolescent Health Risk Behavior
HED 361	Psychosocial Issues in Women's Health
HED 370K	Topical Seminar in Health Promotion (Topic 1: Foundations of Health Promotion I)
HED 371K	Foundations of Health Promotion II
HIS 350R	Undergraduate Seminar in United States History (Topic 18: Women in Sickness and Health)
J 349F	Reporting Public Health and Science
KIN 334	Children's Exercise and Physical Activity
KIN 378	Fieldwork in Health (Topic 3: Sexual Health I)
N 275 or N 287Q	Public Health Nursing Public Health Nursing
N 307	Topics in Nursing (Topic 1: Women's Reproductive Health for Nonscience Majors)
N 309	Global Health
NTR 330	Nutrition Education and Counseling
NTR 331	International Nutrition: Social and Environmental Policies

Population/Mass Media:

NTR 332 NTR 337	Community Nutrition Principles of Epidemiology in Nutritional Sciences	WGS 301	Introductory Topics in Women's and Gender Studies (Topic 20: Fertility and Reproduction)
NTR 338W	Issues in Nutrition and Health	or SOC 307K	Fertility and Reproduction
NTR 365	Selected Topics in Nutritional Sciences (Topic 4: Obesity and Metabolic Health)	WGS 301	Introductory Topics in Women's and Gender Studies (Topic 21: Gender, Race, Class in American Societies)
PBH 317	Introduction to Public Health	WGS 322	Introduction to Women's and
PBH 334	Global Health		Gender Studies in the Social Sciences (Topic 1: Sociology of
PBH 338	Environmental Health		Gender)
PBH 341R	Public Health Research	or SOC 333K	Sociology of Gender
PBH 356	Health Behavior Theory and Practice	WGS 345	Topics in Women's and Gender Studies (Topic 3: Women in
PBH 358D	Health Policy and Health Systems		Sickness and Health)
PBH 361P	Public Health Internship	WGS 345	Topics in Women's and Gender
PHL 325M	Medicine, Ethics, and Society		Studies (Topic 35: Psychosocial
PSY 319K	Social Psychology		Issues Women's Health)
PSY 339	Behavior Problems of Children		livision hours from the above areas of 6
PSY 341K	Selected Topics in Psychology (Topic 4: Health Psychology)	college	ist be from outside the student's major
PSY 346K	Psychology of Sex	Please Note:	
PSY 352	Abnormal Psychology	-	C- (or CR for courses offered only on a juired in each course counted toward
PSY 364M	Mental Illness and the Brain	fulfillment of the mine	
S W 334	Social Work Practice in		
0.00.000	Organizations and Communities	Journalism M	inor
S W 360K	Current Social Work Topics (Topic 5: Facilitating Dialogues on LGBTQ Oppression)	University the opportu	r affords undergraduate students across the unity to study a range of courses that will help
S W 360K	Current Social Work Topics (Topic 9: Loss and Grief: Individual and Family Perspectives)	writing clearly and su including audio, video	digital communication economy. These include ccinctly; telling stories in multiple formats, and data visualizations; thinking critically about h media and society; communicating through social
SOC 307L	Gender, Race, and Class in American Society	media platforms; and understanding how journalism influences the wa individuals and groups are perceived.	
SOC 307P	Introduction to the Sociology of Health and Well-Being	In order to apply for a	Journalism Minor, a student must have at least a
SOC 310S	Women's Reproductive Health for Nonscience Majors	The School reserves t	mpleted Journalism 301F and earned at least a <i>B</i> he right to limit the number of students accepted b. If demand exceeds space available, students
SOC 321G	Global Health Issues and Health Systems	will be selected based	I on a review of academic record, particularly alism 301F. At least 12 hours must be taken in
SOC 354K	Sociology of Health and Illness		tter grade (no pass/fail). Participating students
SOC 358D	Health Policy and Health Systems		overall at the end of each academic year in order to
SOC 368D	Social Context of Public Health	continue in the minor.	
SDS 302	Data Analysis for the Health Sciences		quires 15 hours of coursework, including at least Irs. Students must fulfill the following requirements:
SDS 304	Statistics in Health Care		
SDS 332	Statistical Models for the Health and Behavioral Sciences	<b>Requirements</b> J 301F	HoursFundamental Issues in Journalism3
T C 358	Plan II Junior Seminar (Topic: Public Health, Medicine, and Social Policy)	J 302F	Digital Storytelling Basics 3
URB 354	Topics in Urban Society and Culture	Nine additional hours	
	(Topic 10: Human Behavior and Social Environment)	J 310F J 311F	Reporting: Words Reporting: Images
or S W 327	Human Behavior and Social Environment	J 318P	Podcasting
WGS 301	Introductory Topics in Women's and Gender Studies (Topic 7:	J 331M	Media Innovation and Entrepreneurship
	Women's Reproductive Health for	J 332D	Web Production and Editing
	Nonscience Majors)	J 332G	Explanatory Journalism: Storytelling in a Digital Age

J 334N	Oral History in Multimedia Storytelling
J 336F	Social Media Journalism
J 336J	Lifestyle Journalism
J 336M	Music Journalism
J 337F	Long-Form Feature Writing
J 337J	Writing for Online News Audiences
J 341F	Understanding African Americans and the Media
J 341J	Minorities and the Media
J 342G	Reporting the World: A Critical Examination of the United States News Media
J 346G	Domestic Issues and Global Perspective
J 347F	Reporting Latin America
J 348D	Gender and the News
J 350F	Media Law
J 351F	Journalism, Society, and the Citizen Journalist
J 352F	Ethics in Journalism
J 353F	Historical Perspectives in Journalism
J 354F	Journalism and Press Freedom in Latin America
J 355F	Living in the Information Age
J 358N	Online Incivility
J 358P	Popular Culture and the Press
Please Note	

Please Note

Successful completion of Journalism 310F with a grade of Bor better is required before taking the following courses:

J 318P	Podcasting
J 331M	Media Innovation and Entrepreneurship
J 332D	Web Production and Editing
J 332G	Explanatory Journalism: Storytelling in a Digital Age
J 336J	Lifestyle Journalism
J 336M	Music Journalism
J 337F	Long-Form Feature Writing
J 337J	Writing for Online News Audiences
J 342G	Reporting the World: A Critical Examination of the United States News Media
J 347F	Reporting Latin America
J 348D	Gender and the News
J 352F	Ethics in Journalism

1. Students must receive at least a B- in Journalism 301F in order to be considered for acceptance into the minor

2. At least two courses must be upper-division

## **Media and Entertainment Industries Minor**

The minor in Media and Entertainment Industries will provide undergraduates with an understanding of how the media and entertainment industries operate. Students will survey the histories, structures, and contemporary work practices of the media and entertainment industries. They will learn about the activities of media organizations and how media professionals navigate a rapidly changing industrial environment. The minor is designed to prepare students for careers within and related to a range of media and entertainment industries and professions including film, television, social and mobile media, and gaming, among other possibilities. Students will be exposed to a range of employment opportunities in both the private and public sectors at a time when the media landscape is undergoing rapid transformations both nationally and internationally.

The Media and Entertainment Industries minor allows students from a range of majors across the University to interact in class, engage in experiential learning, enhance their employment qualifications, and generally prepare them to be leaders in these dynamically evolving industries. The minor also allows enough flexibility for students to customize their study to focus on areas of the media and entertainment industries of great interest to them.

This program is open only to students who are not majoring in Radio-Television-Film. Applicants must have a 2.5 cumulative grade point average. The Radio-Television-Film Department reserves the right to limit the number of students accepted as Media and Entertainment Industries minors. If demand exceeds space available, students will be selected based such factors as GPA, prior coursework taken, prior experience in the field, and response to essay prompts. Acceptance into the minor does not come with preference or guarantee of a seat in any RTF course.

The minor requires 15 hours of coursework, with at least nine hours being upper-division and at least nine hours completed in residence. All courses must be taken for a letter grade, unless the course is only offered on the pass/fail basis. Only courses with a *C*- or better (or *CR* for courses offered only on a pass/fail basis) will be counted toward the minor.

Courses that appear in multiple lists may only be counted once. If a student chooses to take a six-hour internship course, only three of the hours may count toward the minor. Only three hours of non-internship coursework taken during the Semester in Los Angeles Program may be counted toward the minor. Students must petition the internship coordinator in advance if they wish to substitute another internship course number in place of Radio-Television-Film 330N.

Students must take the following coursework:

Requirements		Hours	
RTF 303C	Introduction to Media and Entertainment Industries		3
Three hours from the fol	lowing:		3
RTF 330N	Internship in Media Industries		
RTF 347P	The Business of Hollywood		
RTF 350L	Semester in Los Angeles Internship		
RTF 650L	Semester in Los Angeles Internship		
RTF 367K	Producing Film and Television		
Nine hours from the follo	owing:		9
RTF 306	Introduction to World Cinema History		
RTF 308	Development of Film and Media		
RTF 321C	History of American Television		
RTF 324C	Introduction to Global Media		
RTF 331K	Film, Video, and Television Theory (Topic 8: Transmedia Storytelling)		
RTF 333	Introduction to Screenwriting		
RTF 335	Television Analysis and Criticism (Topic 3: Contemporary Television Criticism)		

	RTF 342S	Topics in Global Media (Topic 1: Global Hollywood)
	RTF 345	Studies in Film History (Topic 7: British Film and Television)
	RTF 347C	The Business of Media (Topic 3: The Entertainment Industry: The Big Picture)
	RTF 347P	The Business of Hollywood
	RTF 348	Studies in Media Industries (Topic 2: Development Process of Film and Television-Los Angeles)
	RTF 348	Studies in Media Industries (Topic 3: Inside the Music Industry-Los Angeles)
	RTF 348	Studies in Media Industries (Topic 4: New Media and Emerging Entertainment-Los Angeles)
	RTF 359	Studies in Media and Culture (Topic 3: Asian American Media Cultures)
	RTF 359S	Studies in Media and Culture (Topic 13: Latin American Television)
	RTF 365	Topics in Media and Society (Topic 9: Media Industries and Entrepreneurship)
	RTF 365C	Media and Policy (Topic 1: Media, Communication Law, and Ethics)
	RTF 367K	Producing Film and Television
	RTF 377H	Advanced Topics in Media Studies (Topic 1: Media and Popular Culture)

## **Media Studies Minor**

With the Media Studies minor, students will gain the analytical tools necessary for critical analysis of film, television, and digital media forms within the broader intellectual framework of the humanities and social sciences. Students in the minor will have the opportunity to examine film, broadcasting, games, and mobile media in a range of historical, sociocultural, creative, and industrial contexts. Courses cover diverse topics including global, regional, and national perspectives on the media; authorship, genre, and ideology; representations of race, ethnicity, gender, sexuality, and class; and digital media culture, technologies, policies, and design. As a complement to a major area of study, a minor in media studies can offer deep insight into how media and society interact, and prepare students for a range of careers.

This program is open only to students who are not majoring in RTF. Applicants must have a 2.5 cumulative grade point average. The Radio-Television-Film Department reserves the right to limit the number of students accepted as Media Studies minors. If demand exceeds space available, students will be selected based on a review of the applicant's academic record. Acceptance into the minor does not come with preference or guarantee of a seat in any RTF course.

The minor requires 15 hours of coursework, and at least nine hours completed in residence. Courses that appear in multiple groupings may only be counted once. All courses must be taken for a letter grade, unless the course is only offered on the pass/fail basis. Only courses with a *C*- or better (or *CR* for courses offered only on a pass/fail basis) will be counted toward the minor.

Production and screenwriting courses offered in the Radio-Television-Film Department do not count toward the Media Studies minor. Students must take the following coursework:

Requirements		Hours	2
Three hours from the foll	5		3
RTF 306	Introduction to World Cinema History		
RTF 307	Media and Society		
RTF 308	Development of Film and Media		
Six hours from the follow	ving:		6
RTF 321C	History of American Television		
RTF 321D	Film History to 1960		
RTF 322D	Film History 1960 to Present		
RTF 323C	Screening Race		
RTF 324C	Introduction to Global Media		
RTF 326C	Tech Culture		
RTF 328C	Gender and Media Culture		
Six hours from the follow	/ing:		6
RTF 321C	History of American Television		
RTF 321D	Film History to 1960		
RTF 322D	Film History 1960 to Present		
RTF 323C	Screening Race		
RTF 324C	Introduction to Global Media		
RTF 326C	Tech Culture		
RTF 327C	Digital Remix Cultures		
RTF 328C	Gender and Media Culture		
RTF 330K	Introduction to Research Methods		
RTF 331K	Film, Video, and Television Theory (Topic 5: Screen Theory)		
RTF 331K	Film, Video, and Television Theory (Topic 7: Stardom and Celebrity Culture)		
RTF 331K	Film, Video, and Television Theory (Topic 8: Transmedia Storytelling)		
RTF 331M	New Communication Technologies (Topic 1: Digital Media and Design)		
RTF 331N	The Information Society (Topic 1: Information Society and Beyond)		
RTF 331P	Topics in New Communication Technologies (Topic 3: Internet Cultures)		
RTF 331P	Topics in New Communication Technologies (Topic 4: Video Game Culture and Criticism)		
RTF 335	Television Analysis and Criticism (Topic 2: Race, Class and Gender in American Television)		
RTF 335	Television Analysis and Criticism (Topic 3: Contemporary Television Criticism)		
RTF 342	Topics in Global Media (Topic 1: National Media Systems)		
RTF 342	Topics in Global Media (Topic 2: Comparative Media Systems)		
RTF 342	Topics in Global Media (Topic 7: Global Media Systems)		
RTF 342	Topics in Global Media (Topic 8: Development Communication and Social Change)		

RTF 342S	Topics in Global Media (Topic 1:	RTF 365C	Media and Policy (Topic 1: Media,		
	Global Hollywood)		Communication Law, and Ethics)		
RTF 342S	Topics in Global Media (Topic 2: Indian Cinema)	RTF 365D	Media Literacy (Topic 2: Children, Youth, and Media)		
RTF 345	Studies in Film History (Topic 3: History of Mexican Cinema)	RTF 365D	Media Literacy (Topic 3: Media Literacy and Civic Engagement)		
RTF 345	Studies in Film History (Topic 7: British Film and Television)	RTF 370	Film Analysis and Criticism (Topic 1: Comedy in Film and Media)		
RTF 345	Studies in Film History (Topic 8: Social Documentary)	RTF 370	Film Analysis and Criticism (Topic 2: Animation Studios)		
RTF 345	Studies in Film History (Topic 9: Women Behind the Camera)	RTF 370	Film Analysis and Criticism (Topic 3: Asian Horror Film)		
RTF 345	Studies in Film History (Topic 10: Chinese Auteurs)	RTF 370	Film Analysis and Criticism (Topic 4: Film Noir)		
RTF 345C	Experimental Media and the Art of Disruption	RTF 370	Film Analysis and Criticism (Topic 5: Films of Clint Eastwood)		
RTF 347C	The Business of Media (Topic 3: The Entertainment Industry: The Big Picture)	RTF 370	Film Analysis and Criticism (Topic 6: Films of Alfred Hitchcock)		
RTF 347P	The Business of Hollywood	RTF 370	Film Analysis and Criticism (Topic 7: Films of Martin Scorsese)		
RTF 352	Global Media and Area Studies (Topic 1: Media and the Middle	RTF 370	Film Analysis and Criticism (Topic 8: Independent American Cinema)		
RTF 359	East) Studies in Media and Culture (Topic 3: Asian American Media Cultures)	RTF 377H	Advanced Topics in Media Studies (Topic 1: Media and Popular Culture)		
RTF 359	Studies in Media and Culture (Topic 5: Social Media: Growth, Uses, and	RTF 377H	Advanced Topics in Media Studies (Topic 2: Queer Media Studies)		
RTF 359	Impacts) Studies in Media and Culture (Topic 6: Gender, Race, and Sexuality in Sports Media)	RTF 377S	Advanced Topics in Media Studies with Screenings (Topic 1: Landscape Cinema)		
RTF 359	Studies in Media and Culture (Topic		munication Minor		
RTF 359S	7: Race and Digital Media Culture) Studies in Media and Culture (Topic 8: Latina/os and U.S. Media)	with undergraduate s	nication Minor is designed to help prepare student studies in a sciences-related field to effectively a topics to a variety of audiences by utilizing		
		professional commu	communicate science topics to a variety of audiences by utilizing professional communication techniques and tools. Students will gain an understanding of contemporary communication issues that may impact		
RTF 359S	Studies in Media and Culture (Topic 9: Latina Feminisms and Media)	understanding of cor	nemporary communication issues that may impac		
RTF 359S		their field, and gain a the public, whether th	dvanced skills to enhance their communication wi nrough traditional media, new media, or in person.		
	9: Latina Feminisms and Media) Studies in Media and Culture (Topic	their field, and gain a the public, whether th This program is open Natural Sciences or t	dvanced skills to enhance their communication win prough traditional media, new media, or in person. I only to students with majors in the College of he Moody College of Communication. To declare		
RTF 359S	9: Latina Feminisms and Media) Studies in Media and Culture (Topic 10: Gender and Media in the '60's) Studies in Media and Culture (Topic	their field, and gain a the public, whether th This program is open Natural Sciences or t	dvanced skills to enhance their communication winnough traditional media, new media, or in person. I only to students with majors in the College of the Moody College of Communication. To declare nication minor, a student must have at least a		
RTF 359S RTF 359S	<ul> <li>9: Latina Feminisms and Media)</li> <li>Studies in Media and Culture (Topic 10: Gender and Media in the '60's)</li> <li>Studies in Media and Culture (Topic 11: Brazilian Media)</li> <li>Studies in Media and Culture (Topic</li> </ul>	their field, and gain a the public, whether th This program is open Natural Sciences or t the Science Commur cumulative 2.5 grade The minor requires 12 be taken at the uppen	dvanced skills to enhance their communication winnough traditional media, new media, or in person. I only to students with majors in the College of the Moody College of Communication. To declare nication minor, a student must have at least a		
RTF 359S RTF 359S RTF 359S	<ul> <li>9: Latina Feminisms and Media)</li> <li>Studies in Media and Culture (Topic 10: Gender and Media in the '60's)</li> <li>Studies in Media and Culture (Topic 11: Brazilian Media)</li> <li>Studies in Media and Culture (Topic 12: Gender and Fan Culture)</li> <li>Studies in Media and Culture (Topic</li> </ul>	their field, and gain a the public, whether th This program is open Natural Sciences or t the Science Commun cumulative 2.5 grade The minor requires 1 be taken at the uppen in residence.	dvanced skills to enhance their communication with prough traditional media, new media, or in person. I only to students with majors in the College of the Moody College of Communication. To declare nication minor, a student must have at least a point average. 8 semester hours of coursework. Nine hours must r-division level and at least nine hours must be take		
RTF 359S RTF 359S RTF 359S RTF 359S	<ul> <li>9: Latina Feminisms and Media)</li> <li>Studies in Media and Culture (Topic 10: Gender and Media in the '60's)</li> <li>Studies in Media and Culture (Topic 11: Brazilian Media)</li> <li>Studies in Media and Culture (Topic 12: Gender and Fan Culture)</li> <li>Studies in Media and Culture (Topic 13: Latin American Television)</li> <li>Studies in Media and Culture (Topic</li> </ul>	their field, and gain a the public, whether th This program is open Natural Sciences or t the Science Commur cumulative 2.5 grade The minor requires 12 be taken at the uppen	dvanced skills to enhance their communication with prough traditional media, new media, or in person. I only to students with majors in the College of the Moody College of Communication. To declare nication minor, a student must have at least a point average. 8 semester hours of coursework. Nine hours must r-division level and at least nine hours must be take		
RTF 359S RTF 359S RTF 359S RTF 359S RTF 359S	<ul> <li>9: Latina Feminisms and Media)</li> <li>Studies in Media and Culture (Topic 10: Gender and Media in the '60's)</li> <li>Studies in Media and Culture (Topic 11: Brazilian Media)</li> <li>Studies in Media and Culture (Topic 12: Gender and Fan Culture)</li> <li>Studies in Media and Culture (Topic 13: Latin American Television)</li> <li>Studies in Media and Society (Topic 14: Latino Images in Film)</li> <li>Topics in Media and Society (Topic 8: Migration and Media)</li> <li>Topics in Media and Society (Topic 9: Media Industries and</li> </ul>	their field, and gain a the public, whether th This program is open Natural Sciences or t the Science Commun cumulative 2.5 grade The minor requires 14 be taken at the upper in residence. The minor requireme <b>Requirements</b> ADV 323	dvanced skills to enhance their communication with prough traditional media, new media, or in person. I only to students with majors in the College of the Moody College of Communication. To declare nication minor, a student must have at least a point average. 8 semester hours of coursework. Nine hours must r-division level and at least nine hours must be take nts are: Public Communication of Science and Techology		
RTF 359S	<ul> <li>9: Latina Feminisms and Media)</li> <li>Studies in Media and Culture (Topic 10: Gender and Media in the '60's)</li> <li>Studies in Media and Culture (Topic 11: Brazilian Media)</li> <li>Studies in Media and Culture (Topic 12: Gender and Fan Culture)</li> <li>Studies in Media and Culture (Topic 13: Latin American Television)</li> <li>Studies in Media and Culture (Topic 14: Latino Images in Film)</li> <li>Topics in Media and Society (Topic 8: Migration and Media)</li> <li>Topics in Media and Society (Topic 9: Media Industries and Entrepreneurship)</li> <li>Topics in Media and Society (Topic</li> </ul>	their field, and gain a the public, whether th This program is open Natural Sciences or t the Science Commun cumulative 2.5 grade The minor requires 1 be taken at the upper in residence. The minor requirement <b>Requirements</b> ADV 323 Three hours of cours approved Foundation	dvanced skills to enhance their communication with prough traditional media, new media, or in person. In only to students with majors in the College of the Moody College of Communication. To declare nication minor, a student must have at least a point average. 8 semester hours of coursework. Nine hours must r-division level and at least nine hours must be take ints are: Public Communication of Science and Techology rework chosen from the following list of the scourses:		
RTF 359S         RTF 359S         RTF 359S         RTF 359S         RTF 359S         RTF 365         RTF 365         RTF 365         RTF 365	<ul> <li>9: Latina Feminisms and Media)</li> <li>Studies in Media and Culture (Topic 10: Gender and Media in the '60's)</li> <li>Studies in Media and Culture (Topic 11: Brazilian Media)</li> <li>Studies in Media and Culture (Topic 12: Gender and Fan Culture)</li> <li>Studies in Media and Culture (Topic 13: Latin American Television)</li> <li>Studies in Media and Culture (Topic 14: Latino Images in Film)</li> <li>Topics in Media and Society (Topic 8: Migration and Media)</li> <li>Topics in Media and Society (Topic 9: Media Industries and Entrepreneurship)</li> <li>Topics in Media and Society (Topic 10: Globalization and Social Media)</li> </ul>	their field, and gain a the public, whether th This program is open Natural Sciences or t the Science Commun cumulative 2.5 grade The minor requires 14 be taken at the upper in residence. The minor requireme <b>Requirements</b> ADV 323 Three hours of cours approved Foundation ADV 305	dvanced skills to enhance their communication with traditional media, new media, or in person. If only to students with majors in the College of the Moody College of Communication. To declare nication minor, a student must have at least a point average. 8 semester hours of coursework. Nine hours must redivision level and at least nine hours must be taken the are: 9 Public Communication of Science and Techology 10 rework chosen from the following list of the sourses: 11 Fundamentals of Advertising		
RTF 359S RTF 359S RTF 359S RTF 359S RTF 359S RTF 365 RTF 365	<ul> <li>9: Latina Feminisms and Media)</li> <li>Studies in Media and Culture (Topic 10: Gender and Media in the '60's)</li> <li>Studies in Media and Culture (Topic 11: Brazilian Media)</li> <li>Studies in Media and Culture (Topic 12: Gender and Fan Culture)</li> <li>Studies in Media and Culture (Topic 13: Latin American Television)</li> <li>Studies in Media and Culture (Topic 14: Latino Images in Film)</li> <li>Topics in Media and Society (Topic 8: Migration and Media)</li> <li>Topics in Media and Society (Topic 9: Media Industries and Entrepreneurship)</li> <li>Topics in Media and Society (Topic 10: Globalization and Society (Topic 10: Globalization and Society (Topic 12: Mapping Latino Culture in East</li> </ul>	<ul> <li>their field, and gain a the public, whether the This program is open Natural Sciences or the Science Communicumulative 2.5 grade</li> <li>The minor requires 14 be taken at the upper in residence.</li> <li>The minor requirements</li> <li>ADV 323</li> <li>Three hours of cours approved Foundation ADV 305</li> <li>ADV 324</li> </ul>	dvanced skills to enhance their communication with the provident of the moody College of Communication. To declare the moody College of Communication of Science and Techology the work chosen from the following list of the scourses:  Fundamentals of Advertising Communicating Sustainability		
RTF 359S         RTF 359S         RTF 359S         RTF 359S         RTF 359S         RTF 365         RTF 365         RTF 365         RTF 365	<ul> <li>9: Latina Feminisms and Media)</li> <li>Studies in Media and Culture (Topic 10: Gender and Media in the '60's)</li> <li>Studies in Media and Culture (Topic 11: Brazilian Media)</li> <li>Studies in Media and Culture (Topic 12: Gender and Fan Culture)</li> <li>Studies in Media and Culture (Topic 13: Latin American Television)</li> <li>Studies in Media and Culture (Topic 14: Latino Images in Film)</li> <li>Topics in Media and Society (Topic 8: Migration and Media)</li> <li>Topics in Media and Society (Topic 9: Media Industries and Entrepreneurship)</li> <li>Topics in Media and Society (Topic 10: Globalization and Society (Topic 10: Globalization and Society (Topic</li> </ul>	their field, and gain a the public, whether th This program is open Natural Sciences or t the Science Commun cumulative 2.5 grade The minor requires 14 be taken at the upper in residence. The minor requireme <b>Requirements</b> ADV 323 Three hours of cours approved Foundation ADV 305	dvanced skills to enhance their communication with traditional media, new media, or in person. If only to students with majors in the College of the Moody College of Communication. To declare nication minor, a student must have at least a point average. 8 semester hours of coursework. Nine hours must redivision level and at least nine hours must be taken the are: 9 Public Communication of Science and Techology 10 rework chosen from the following list of the sourses: 11 Fundamentals of Advertising		

CMS 315M	Interpersonal Communication Theory	
CMS 332K	Theories of Persuasion	
CMS 334K	Nonverbal Communication	
CMS 342K	Political Communication	
CMS 345	Media Effects and Politics	
J 301F	Fundamental Issues in Journalism	
Three hours of coursework Skills courses:	ork from the following list of approved	3
COM 308	Creative Communication of Scientific Research	
CMS 316L	Interviewing Principles and Practices	
CMS 320	Advanced Presentation Skills	
CMS 337	Building Sales Relationships	
CMS 345G	Communicating to Government	
CMS 350C	Crowds, Clouds, and Community	
CMS 353S	Social Media and Organizations	
CMS 360W	Work360	
CMS 372K	Advanced Organizational Communication	
COM 323	Communication Internship (Topic 4: Science Communication Internship)	
J 313P	Multimedia News Reporting	
J 336F	Social Media Journalism	
J 346F	Reporting on the Environment	
Three hours of coursew and Leadership courses	ork from the following list of Ethics	3
CLD 301	Introduction to Communication and Leadership	
CMS 322E	Communication Ethics	
CMS 332	Argumentation and Advocacy	
CMS 338	Leadership Stories	
CMS 344K	Lying and Deception	
CMS 353C	Communication for Innovation	
Six additional hours of c	oursework chosen from Foundations,	6

Skills, and Ethics and Leadership courses

Please Note:

All courses must be taken for a letter grade, and only courses with a grade of C- or better (or CR for courses offered only on a pass/fail basis) will be counted.

Students pursuing the minor may enroll in any of the approved courses for which he or she meets the prerequisite. Prerequisites for journalism courses may be waived after consultation and consent of the instructor. However, it is recommended that students take Journalism 310F prior to 346F.

## **Sports Media Minor**

The Sports Media Minor is designed to complement a student's education by developing his or her proficiency and knowledge in the area of sports media. A student may enroll in any of the courses for which he or she meets the prerequisites.

The minor requires 18 semester hours of coursework. Nine hours must be taken at the upper-division level and at least nine hours must be taken in residence. Students must earn a grade of at least *C*- (or *CR* for courses offered only on a pass/fail basis) in each course.

The requirements are:

Requirements	Hours	
COM 323	Communication Internship (Topic 1: Sports Media Internship)	3
ADV 305S	Introduction to Integrated Communication for Sports	3
or P R 305S	Introduction to Integrated Communication for Sports	r
ADV 348S	The Business of Sports Media	3
or P R 348S	The Business of Sports Media	
or J 348G	The Business of Sports Media	
Nine hours of coursewor	k to be selected from:	
ADV/P R 378S	Special Topics in Sports Media (Topic 8: College Sports Media)	
ADV/P R 378S	Special Topics in Sports Media (Topic 9: Sports Contract Negotiation Techniques)	
ADV/P R 378S	Special Topics in Sports Media (Topic 11:Sports and Social Media)	
ADV/P R 378S	Special Topics in Sports Media (Topic 12: Sports Audiences)	
CMS 347K	Rhetoric of Popular Culture	
J 326F	Reporting Sports	
KIN 350	Sociological Aspects of Sport and Physical Activity	
KIN 354	Sport and Event Marketing	
KIN 355	Media and Public Relations in Sport	

Please Note: Additional electives may be offered on a semester-bysemester basis.

# US Latino and Latin American Media Studies Minor

This concentration is designed to introduce students to United States Latino and Latin American issues in communication and the media and to give them the opportunity to prepare for professional work related to these areas in addition to their major. The minor requires 18 hours of coursework, including at least nine hours completed in residence. Students must fulfill the following requirements:

	Hours	
Introduction to World Cinema History <sup>1</sup>		3
Media and Society		
Screening Race		3
on elective coursework chosen from		6
International Advertising		
Reporting en Espanol		
Oral History as Journalism		
Oral History in Multimedia Storytelling		
Minorities and the Media		
Reporting Latin America		
Journalism and Press Freedom in Latin America		
Film History 1960 to Present		
Introduction to Global Media		
	History <sup>1</sup> Media and Society Screening Race n elective coursework chosen from International Advertising Reporting en Espanol Oral History as Journalism Oral History in Multimedia Storytelling Minorities and the Media Reporting Latin America Journalism and Press Freedom in Latin America Film History 1960 to Present	Introduction to World Cinema History <sup>1</sup> Media and Society Screening Race on elective coursework chosen from International Advertising Reporting en Espanol Oral History as Journalism Oral History as Journalism Oral History in Multimedia Storytelling Minorities and the Media Reporting Latin America Journalism and Press Freedom in Latin America Film History 1960 to Present

RTF 335	Television Analysis and Criticism (Topic 2: Race, Class and Gender in American Television)
RTF 342	Topics in Global Media (Topic 7: Global Media Systems)
RTF 342S	Topics in Global Media (Topic 1: Global Hollywood)
RTF 345	Studies in Film History (Topic 3: History of Mexican Cinema)
RTF 359	Studies in Media and Culture (Topic 7: Race and Digital Media Culture)
RTF 359S	Studies in Media and Culture (Topic 8: Latina/os and U.S. Media)
RTF 359S	Studies in Media and Culture (Topic 9: Latina Feminisms and Media)
RTF 359S	Studies in Media and Culture (Topic 12: Gender and Fan Culture)
RTF 359S	Studies in Media and Culture (Topic 13: Latin American Television)
RTF 359S	Studies in Media and Culture (Topic 14: Latino Images in Film)
RTF 365	Topics in Media and Society (Topic 8: Migration and Media)
RTF 365	Topics in Media and Society (Topic 12: Mapping Latino Culture in East Austin)
RTF 366K	Introductory Production (Topic 4: East Austin Stories)
	pper or lower division elective prican Studies or Mexican American

coursework in Latin American Studies or Mexican American Studies

Please Note:

All courses must be taken for a letter grade, and only courses with a grade of C- or better (or CR for courses offered only on a pass/fail basis) will be counted.

1. Radio-Television-Film 306 should be taken by non-RTF majors and Radio-Television-Film 307 should be taken by RTF majors

This program is open to all undergraduate students at The University of Texas at Austin. Certain course prerequisites, for approved courses in the Moody College of Communication, may be waived once the student is accepted to the program.

Each degree program in the Moody College of Communication imposes a limit on the number of hours in the College that may be counted toward the degree; each also imposes limits on the number of hours in the major that may be counted. For students who complete the US Latino and Latin American Media Studies minor, these limits may be modified with the approval of the Student Advising Office.

## Visual Media Minor

The Visual Media Minor affords undergraduate students across the University the opportunity to increase their visual literacy and skills, particularly in the areas of photography, photojournalism, video storytelling, and graphic design. In addition, students study the foundations of journalism ethics and learn techniques to approach ethical decisions within the field of visual media.

In order to apply for a Visual Media Minor, a student must have at least 2.5 GPA and have completed Communication 316. If demand exceeds space available, students will be selected based on a review of academic record, particularly performance in Communication 316, as well as

a review of their visual portfolio. The School of Journalism reserves the right to limit the number of students accepted as Visual Media Minors. Participating students must have a 2.5 GPA overall at the end of each academic year in order to continue in the minor. This minor is not available to students majoring in Journalism.

The minor program requires 15 hours of coursework, at least 12 of which must be completed in residence, with at least six taken at the upperdivision level. All courses must be taken for a letter grade, unless a course is only offered on a pass/fail basis. Students must fulfill the following requirements:

Requirements		Hours	
COM 316	Photographic Communication		3
J 352F	Ethics in Journalism		3
Nine additional hours to l	be selected from these courses:		9
J 311F	Reporting: Images		
J 330J	Advanced Photo Editing and Design		
J 331D	Intermediate Photographic Communication		
J 333G	Advanced Visual Journalism: Photo		
J 333J	Photography for Reporting Texas		
J 334G	Advanced Visual Journalism: Video		
J 336D	Graphic Design for Print and Online		
J 340J	Documentary Tradition of Latin America		
J 347G	Cultural Survey of Photography		

## **Courses for Teacher Preparation**

The college does not currently offer a teaching certification program for any of its degrees. Students who wish to pursue teacher certification should consult the teacher certification officer in the College of Education.

## Courses

6

The faculty has approval to offer the following courses in the academic years 2018–2019; and 2019–2020; however, not all courses are taught each semester or summer session. Students should consult the *Course Schedule* (http://registrar.utexas.edu/schedules) to determine which courses and topics will be offered during a particular semester or summer session. The *Course Schedule* (http://registrar.utexas.edu/ schedules) may also reflect changes made to the course inventory after the publication of this catalog.

A full explanation of course numbers is given in *General Information* (http://catalog.utexas.edu/general-information). In brief, the first digit of a course number indicates the semester hour value of the course. The second and third digits indicate the rank of the course: if they are 01 through 19, the course is of lower-division rank; if 20 through 79, of upper-division rank; if 80 through 99, of graduate rank.

## Communication

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

## **Communication: COM**

## **Lower-Division Courses**

## COM 301C. Freshman Seminar.

Restricted to first-semester freshmen. Small-group seminar involving reading, discussion, writing, and oral reports. Introduction to University resources, including libraries, computer and research facilities, and museums. Several sections are offered each semester, with various topics and instructors. Two lecture hours and one discussion hour a week for one semester.

### COM 301L. Introduction to Communication and Leadership.

Introduces the study of leadership with an emphasis on communication dimensions and interdisciplinary understanding of social problems. Serves as a foundation for subsequent coursework in the areas of communication and leadership. Three lecture hours a week for one semester. Communication 301L and Communication and Leadership 301 may not both be counted.

#### COM 102. Introduction to Health Communication.

Covers contemporary issues in health communication theory and practice with an emphasis on interdisciplinary perspectives. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester.

#### COM 102D, 202D, 302D. Connecting Internship Experience.

Supervised internship experience related to interdisciplinary themes of a Bridging Disciplines Program. Internships may be on or off campus, be paid or unpaid, and may include work with nonprofit agencies, government offices, or private corporations. For 102D, three hours of fieldwork a week for one semester; for 202D, six hours of fieldwork a week for one semester; for 302D, ten hours of fieldwork a week for one semester. With consent of the Bridging Disciplines Program research coordinator, may be repeated once for credit. May not be counted toward any College of Communication degree. Prerequisite: Admission to the Bridging Disciplines Programs.

## COM 303. Introduction to Contemporary Media Literacy.

Offers an introduction to media literacy, which enables us to create and critique contemporary media, and explores the expanding nature of literacy in a digital world with particular focus on its role in social and political contexts. Three lecture hours a week for one semester.

#### COM 304. Global Communication.

Introduces the subject of global media and communication as significant industries, texts, and technologies that contribute to our cultural identities, social worlds, political practices, and economic consequences. Three lecture hours a week for one semester.

## COM 105. Beyond the Bridge.

Restricted to students in the Moody College of Communication. Provides an overview of the concepts involved in career decision-making and the career planning process. One lecture hour per week for one semester.

#### COM 306. Introduction to Communication Research Methods.

An introduction to quantitative and qualitative designs, sampling, measurement, data collection, and analytic procedures in communication research. Three lecture hours a week for one semester. Communication 306 and 360 may not both be counted.

## COM 307H. Life of the Mind: Honors.

Restricted to students in the Moody College of Communication Honors Program. A guided experience in critical thinking and discussion based on consideration of cross-disciplinary modes of inquiry to probe big questions about knowledge, meaning, and communication throughout history. Three lecture hours a week for one semester.

#### COM 308. Creative Communication of Scientific Research.

Same as Natural Sciences 303. Learn to communicate about science, technology, and medicine to broad audiences in order to increase understanding of the impact these fields have on human lives. Three lecture hours a week for one semester. Communication 308 and Natural Sciences 303 may not both be counted.

### COM 308H. Life of Community: Honors.

Restricted to students in the Moody College of Communication Honors Program. Considers the social responsibilities of intellectual leadership and the role of communication in a world characterized by political divisions, varieties of inequality, and global challenges to health and sustainability. Three lecture hours a week for one semester.

#### COM 310. Topics in Texas Sports and Media.

Introduction to various contemporary and historical issues, emphasizing interdisciplinary perspectives and critical discourse. Three lecture hours a week for one semester. Communication 310 and Journalism 313S may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

#### COM 114, 214, 314. Special Topics in Communication.

Contemporary issues and practices in communication. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. Only one of the following may be counted unless topics vary: Communication 114, 214, 314, 117, 217, 317, or 118, 218, 318. May be repeated for credit when the topics vary.

## COM 115, 215, 315. Topics in Leadership and Communication.

Restricted to students in the College of Communication. Contemporary issues, practices, and skills related to leadership and communication. For 115, two lecture hours a week for eight weeks; for 215, two lecture hours a week for one semester; for 315, three lecture hours a week for one semester. May be repeated for credit when the topics vary.

## COM 316 (TCCN: COMM 1316). Photographic Communication.

Introduction to photographic technique and recent trends, evaluation, visual design, and use of images in the media. Students must provide their own digital 35-mm format camera. Three lecture hours and one and one-half laboratory hours a week for one semester.

## COM 117, 217, 317. Special Topics in Communication.

Contemporary issues and practices in communication. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. Only one of the following may be counted unless topics vary: Communication 114, 214, 314, 117, 217, 317, or 118, 218, 318. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

#### COM 118, 218, 318. Special Topics in Communication.

Contemporary issues and practices in communication. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. Only one of the following may be counted unless topics vary: Communication 114, 214, 314, 117, 217, 317, or 118, 218, 318. May be repeated for credit when the topics vary. Offered on the pass/fail basis only.

#### COM 118C, 218C, 318C. Forum Seminar Series.

Restricted to freshmen and sophomores. Lectures and discussions on various contemporary issues. Emphasis on multidisciplinary perspectives and critical discourse. For 118C, two lecture hours a week for eight weeks; for 218C, two lecture hours a week for one semester; for 318C, three lecture hours a week for one semester, or two lecture hours and one hour of supervised research a week for one semester. May be repeated for credit when the topics vary.

#### COM 119, 219, 319. International Learning Seminars.

Discussion of various issues related to the academic, cultural, and personal aspects of completing academic work in international locations. For each semester hour of credit earned, one lecture hour a week for one semester. Communication 119, 219, 319, and Undergraduate Studies 119 may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

#### COM 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Communication.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Communication Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

## **Upper-Division Courses**

## COM 320. Advanced Topics in Texas Sports and Media.

Critical assessment of various contemporary and historical issues, emphasizing interdisciplinary perspectives. Three lecture hours a week for one semester. Communication 320 and Journalism 326S may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Completion of at least sixty semester hours of coursework and a University grade point average of at least 2.25.

#### COM 320L. Seminar on Communication and Leadership.

Restricted to students in the Moody College of Communication. Builds on the foundation introduced in Communication 301L, advancing student work in theories, processes, and practices of leadership and communication. Three lecture hours a week for one semester. Communication 320L and Communication and Leadership 321 may not both be counted. Prerequisite: Communication 301L with a grade of at least C and a minimum University grade point average of 2.25.

#### COM 323. Communication Internship.

Practical work experience, arranged by the student and approved by instructor. Internship hours to be arranged. May be repeated for credit when the topics vary. Offered on the pass/fail basis only. Prerequisite: Upper-division standing and consent of instructor.

**Topic 1: Sports Media Internship.** Restricted to students pursuing a minor in Sports Media. Offered on the pass/fail basis only.

**Topic 2: Social Change Internship.** Restricted to students pursuing a minor in Communication and Social Change. Offered on the pass/fail basis only.

**Topic 3: Global Experience.** Restricted to students pursuing a minor in Global Communication. Offered on the pass/fail basis only.

**Topic 4: Science Communication Internship.** Restricted to students pursuing a minor in Science Communication. Offered on the pass/fail basis only.

#### COM 324. Topics and Skills in Communication.

Restricted to students admitted to the Semester in Los Angeles Program. Contemporary issues, practices, and skills related to communication and the entertainment industries, including studies in the business of entertainment, the creative process, and contemporary Hollywood cinema. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing, three hours of lower-division coursework in radio-televisionfilm, and a University grade point average of at least 2.25.

#### Topic 2: Development Process of Film and Television-Los Angeles.

Same as Radio-Television-Film 348 (Topic 2). Restricted to students admitted to the Semester in Los Angeles Program. Examines the development process in both film and television; preparing pitches, coverage, and development notes; identifying strengths and weaknesses of literary material typical of that submitted to studios, networks, and production companies. Taught in Los Angeles, California. Only one of the following may be counted: Communication 324 (Topic: Development Process of Film and Television), 324 (Topic 2), Radio-Television-Film 348 (Topic: Development Process of Film and Television), 348 (Topic 2).

**Topic 3: Inside the Music Industry-Los Angeles.** Same as Radio-Television-Film 348 (Topic 3). Restricted to students admitted to the Semester in Los Angeles Program. Only one of the following may be counted: Communication 324 (Topic: Inside The Music Industry), 324 (Topic 3), Radio-Television-Film 348 (Topic: Inside The Music Industry) and 348 (Topic 3).

**Topic 4: New Media and Emerging Entertainment-Los Angeles.** Same as Radio-Television-Film 348 (Topic 4). Restricted to students admitted to the Semester in Los Angeles Program. Explores burgeoning areas of digital entertainment including broadband, video-on-demand, interactive television, mobile entertainment, and interactive digital gaming. Taught in Los Angeles, California. Only one of the following may be counted: Communication 324 (Topic: New Media and Emerging Entertainment), 324 (Topic 4), Radio-Television-Film 348 (Topic: New Media and Emerging Entertainment), 348 (Topic 4).

**Topic 5: Careers in Entertainment-Los Angeles.** Explores specific career interests with a focus on skills, experience, training, and contacts that are required in Los Angeles. Taught in Los Angeles, California. Only one of the following may be counted: Communication 324 (Topic: Careers in Entertainment), 324 (Topic 5), Radio-Television-Film 324L (Topic: Careers in Entertainment), 324L (Topic 5).

## COM 125, 225, 325. Topics in Leadership and Communication.

Restricted to students in the College of Communication. Contemporary issues, practices, and skills related to leadership and communication. For 125, two lecture hours a week for eight weeks; for 225, two lecture hours a week for one semester; for 325, three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

#### COM 325S. Issues in Sports Media.

Special topics in the role and convergence of sports and the media. Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### Topic 1: Sports, Media, and the Integration of American Society.

Role and convergence of sports, entertainment, and the media in American society and culture from Reconstruction through the present, including the role of institutions in these categories and their relationship to the integration of American society. Only one of the following may be counted: Advertising 378 (Topic: Sports, Media, and the Integration of American Society), Communication 325 (Topic: Sports, Media, and the Integration of American Society), 325S (Topic 1), Journalism 359T (Topic: Sports, Media, and the Integration of American Society), Public Relations 378 (Topic: Sports, Media, and the Integration of American Society). Prerequisite: Upper-division standing and a University grade point average of at least 2.25.

## COM 129, 229, 329, 429, 529, 629. International Learning Seminars.

Restricted to students participating in a Maymester Abroad course. Discussion of various issues related to the academic, cultural, and personal aspects of completing academic work in international locations. For each semester hour of credit earned, one lecture hour a week for one semester. Communication 129, 229, 329, 429, 529, 629 and Undergraduate Studies 119 may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: Upper-division standing.

## COM 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Communication.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the appropriate College of Communication department. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

## COM 330. Research in Texas Sports and Media.

Same as Journalism 339S. Restricted to journalism majors. Supervised research with a faculty member; research may consist of an individual project or assisting a faculty research project. Hours to be arranged. May be repeated for credit. Prerequisite: Upper-division standing and a University grade point average of at least 2.25; and Journalism 310F (or 320D) and 311F (or 321C) with a grade of at least B- in each.

## COM 134, 234, 334. Special Topics in Communication.

Contemporary issues and practices in communication. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. Only one of the following may be counted unless topics vary: Communication 134, 234, 334, 135, 235, 335, or 136, 236, 336. May be repeated for credit when the topics vary.

## COM 135, 235, 335. Special Topics in Communication.

Contemporary issues and practices in communication. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. Only one of the following may be counted unless topics vary: Communication 134, 234, 334, 135, 235, 335, or 136, 236, 336. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

## COM 136, 236, 336. Special Topics in Communication.

Contemporary issues and practices in communication. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. Only one of the following may be counted unless topics vary: Communication 134, 234, 334, 135, 235, 335, or 136, 236, 336. May be repeated for credit when the topics vary. Offered on the pass/fail basis only.

## COM 350, 650. Communication Internship.

Restricted to students in the College of Communication. Internships to be arranged by student and approved by instructor. For 350, an average of 10 hours of work a week, for a total of at least 150 hours a semester or summer term; for 650, an average of 20 hours of work a week, for a total of at least 300 hours a semester or summer term. Offered on the pass/fail basis only. Prerequisite: Upper-division standing and consent of department.

## COM 350L, 650L. Semester in Los Angeles Internship.

Restricted to students in the Semester in Los Angeles Program. Practical work experience in the entertainment industry in Los Angeles. Students must make their own arrangements to secure relevant internships. For 350L, an average of 10 hours of work a week, for a total of at least 150 hours a semester or summer term; for 650L, an average of 20 hours of work a week, for a total of at least 300 hours a semester or summer term. Communication 350L, 650L and Radio-Television-Film 350L, 650L may not both be counted. Offered on the pass/fail basis only. Prerequisite: Upper-division standing.

## COM 351L. Internship in Communication and Leadership.

Restricted to communication and leadership majors. Practical work experience related to the practice of ethical leadership and communication with a non-profit community, or philanthropic organization. An average of 10 hours of work a week, for a total of at least 150 hours a semester or summer term. May not be taken by students who have credit for any three semester-hour communication college internship course. Communication 351L and Communication and Leadership 351 may not both be counted. Offered on the pass/fail basis only. Prerequisite: Upper-division standing, Communication 320L with grade of at least C, and a 2.25 overall GPA, and consent of instructor.

## COM 361. Advanced Communication Research Design.

Advanced studies in quantitative and qualitative designs, sampling, measurement, data collection, and analytic procedures in communication research. Three lecture hours a week for one semester. Prerequisite: Communication 306 or consent of instructor.

## COM 370. Advanced Study in Communication.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing, admission to the College of Communication Honors Program, and consent of instructor.

## COM 370L. Capstone Course in Communication and Leadership.

Restricted to communication and leadership majors. Engagement in experiential learning. Development and presentation of ideas and plans for addressing a leadership challenge given by a partner organization. Three lecture hours a week for one semester. Communication 370L and Communication and Leadership 371 may not both be counted. Prerequisite: Upper-division standing, Communication 320L with a grade of at least C, and a minimum University grade point average of 2.25.

## COM 178. Communication Internship.

Restricted to students in the College of Communication. Practical work experience related to the student's area of interest in the communication field. An average of 10 hours of work a week, for a total of at least 150 hours a semester or summer term. May be repeated, but only one hour may be counted toward a degree in the College of Communication. Offered on the pass/fail basis only. Prerequisite: Completion of a threehour internship course in the College of Communication.

## **Communication and Leadership**

## **Communication and Leadership: CLD**

## **Lower-Division Courses**

## CLD 301. Introduction to Communication and Leadership.

Introduces the study of leadership with an emphasis on communication dimensions and interdisciplinary understanding of social problems. Serves as a foundation for subsequent coursework in the areas of communication and leadership. Three lecture hours a week for one semester. Communication 301L and Communication and Leadership 301 may not both be counted.

## CLD 102, 202, 302. Topics in Communication and Leadership.

Contemporary issues and practices in communication and leadership. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May be repeated for credit when the topics vary.

## CLD 304. Introduction to Philanthropy.

Offers an introduction to philanthropy, focusing on the process of private giving as well as the work of private foundations. Three lecture hours a week for one semester.

## CLD 314. Fundamentals of Philanthropy.

Builds on Introduction to Philanthropy, considering the process of creating and evaluating philanthropic initiatives. Three lecture hours a week for one semester. Prerequisite: Communication and Leadership 304.

## **Upper-Division Courses**

## CLD 320. Topics in Communication and Leadership.

Contemporary issues and practices in communication and leadership. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

## CLD 321. Seminar on Communication and Leadership.

Restricted to students in the Moody College of Communication. Builds on the foundation introduced in Communication and Leadership 301 advancing student work in theories, processes, and practices of leadership and communication. Three lecture hours a week for one semester. Communication 320L and Communication and Leadership 321 may not both be counted. Prerequisite: Communication 301L or Communication and Leadership 301.

## CLD 351. Internship in Communication and Leadership.

Restricted to Communication and Leadership majors. Practical work experience related to the practice of ethical leadership and communication with a non-profit community, or philanthropic organization. An average of 10 hours of work a week, for a total of at least 150 hours a semester or summer term. Communication 351L and Communication and Leadership 351 may not both be counted. Offered on the pass/fail basis only. Prerequisite: Upper-division standing and Communication 320L or Communication and Leadership 321.

## CLD 371. Capstone Course in Communication and Leadership.

Restricted to Communication and Leadership majors. Engagement in experiential learning. Development and presentation of ideas and plans for addressing a leadership challenge given by a partner organization. Three lecture hours a week for one semester. Communication 370L and Communication and Leadership 371 may not both be counted. Prerequisite: Upper-division standing and Communication 320L or Communication and Leadership 321.

## **Department of Advertising**

Because prerequisites are subject to change, students should consult the *Course Schedule* before registering.

To enroll in any upper-division advertising course, an advertising major must have fulfilled the Special Requirements (p. 99) for the Bachelor of Science in Advertising.

## Advertising: ADV

## **Lower-Division Courses**

## ADV 303. Advertising and Popular Culture.

An introduction to the role advertising plays in American society, and the values and relationships offered in the messages that are delivered. Three lecture hours a week for one semester. May not be counted toward the Bachelor of Science in Advertising degree or the Bachelor of Science in Public Relations degree.

## ADV 305. Fundamentals of Advertising.

Fundamentals and practices of advertising in relation to economies, societies, and mass communication. Three lecture hours a week for one semester. May not be counted toward the Bachelor of Science in Advertising or Bachelor of Science in Public Relations degrees.

## ADV 305S. Introduction to Integrated Communication for Sports.

Same as Public Relations 305S. Examination of the mass media industry in relation to the field of sports. Focus on the "off-the-field" industries of advertising, marketing, and public relations that impact sports; rights fees contracts; pre-game shows; gameday production; in-stadium activities; and press coverage. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 305S, 378 (Topic 7: Integrated Communication for Sports), Kinesiology 352K (Topic: Integrated Communication for Sports), Public Relations 305S.

## ADV 309R. Introduction to Advertising and Public Relations Research.

Same as Public Relations 309. Restricted to advertising and public relations majors. Introduction to concepts and methods of statistics, with emphasis on analyzing personal and group behaviors. Includes exploratory data analysis, correlation and regression, descriptive statistics, sampling distributions, confidence intervals, and hypothesis testing. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 309R, 378 (Topic: Introduction to Advertising and Public Relations Research), Public Relations Research).

## ADV 314. Social and Ethical Issues.

Designed to identify, analyze, and respond to social and ethical issues in advertising and public relations. Covers race, ethnicity, and gender identity. Three lecture hours a week for one semester. May not be counted toward the Bachelor of Science in Advertising or the Bachelor of Science in Public Relations degrees.

## ADV 315. History and Development of Advertising.

The evolution and development of advertising in the United States in a social, historical, economic, and cultural context. Three lecture hours a week for one semester.

## ADV 316. Creativity and American Culture.

Same as Public Relations 316. A cross-disciplinary view of the creative process and creative products. The conceptual core of film, fine arts, advertising, architecture, and literature. Three lecture hours a week for one semester. May not be counted toward the Bachelor of Science in Advertising or the Bachelor of Science in Public Relations. Fulfills the communication and culture requirement in the College of Communication.

## ADV 318J. Introduction to Advertising and Integrated Brand Communication.

The functions of advertising and public relations; role in marketing/ communications mix; economic and social influence; advertising and public relations institutions and media; campaigns and appropriations; retail and business-to-business aspects. Three lecture hours a week for one semester. Students may not enroll in Advertising 318J more than twice.

#### ADV 319. Psychology of Advertising.

A review of basic findings of the behavioral sciences dealing with perception, personality, group behavior, psychological appeals, and their application to advertising, public relations, and marketing as persuasive communication. Three lecture hours a week for one semester.

## **Upper-Division Courses**

## ADV 320. Integrated Communication for Nonprofit Organizations.

Same as Public Relations 320. Explores integrated communication and branding in a variety of nonprofit settings. Examines the strategic, integrated use of multiple communication approaches, including advertising, public relations, new media, promotions, sponsorships, and special events. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 320, 378 (Topic 17), Public Relations 320, 378 (Topic 5).

#### ADV 321. Leadership and Ethics.

Same as Public Relations 321. Explores leadership, communication, ethics, and the ability to lead others ethically and effectively. Examine concepts and frameworks related to skills that are integral to ethical, effective leadership. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 321, 378 (Topic 11), Public Relations 321, 378 (Topic: LEADERSHIP AND ETHICS).

## ADV 322. Health Communication: Messages, Campaigns, and the Media.

Same as Public Relations 322. Covers the development of effective health messages, the design of health campaigns, and investigate the role of the media in influencing people's health and perceptions of health. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 322, 378 (Topic: Health Communication), Public Relations 322.

## ADV 323. Public Communication of Science and Techology.

Same as Public Relations 323. Explores the rapidly growing field of science communication. Examines the intersection of science, media, and society, focusing on media's impact on how people come to understand, perceive, and act relative to scientific issues. Special attention will be directed toward the strategic communication of science and maximizing scientists' engagement with public audiences. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 323, 378 (Topic: PUBLIC COMM OF SCIENCE/ TECH), Public Relations 323, 378 (Topic: PUBLIC COMM OF SCIENCE/ TECH).

## ADV 324. Communicating Sustainability.

Same as Public Relations 324. Focuses on persuasion in the context of environmental attitudes and behaviors. Explores how humans think about and interact with the environment, paying particular attention to climate change. Drawing on theory and examples, examines the challenges and opportunities that arise when people try to communicate about the environment and change individual attitudes and behaviors. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 324, 378 (Topic: Communicating Sustainability), Public Relations 324, 378 (Topic: Communicating Sustainability).

#### ADV 325. Introduction to Advertising Creativity.

Learn to apply creative theories, processes, and problem-solving skills to become more creative in any field. Three lecture hours a week for one semester. Prerequisite: Advertising 318J with a grade of at least B.

#### ADV 327. Account Planning.

Explores the role of account planning in an agency environment. Covers how to understand the business the client is in, the customers of the client, general environment of that business and all aspects of marketing practice that might affect the overall performance of the client's business. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 327, 378 (Topic 6), 378 (Topic 20). Prerequisite: Advertising 344K and 345J.

#### ADV 328. Psychology of Video Game Advertising.

Explores communication components (broadly defined) within game play and apply understanding of communication processes within game play to better understand how advertisers can leverage games to reach consumers. Three lecture hours for one semester. Advertising 328 and 378 (Topic 22) may not both be counted. Prerequisite: Upper-division standing.

## ADV 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Advertising.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Advertising. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

## ADV 332. Technology Marketing and Advertising.

Same as Public Relations 332. Explores case histories, interviews with leading technology advertising and marketing executives, and latest trends in digital advertising, both mobile and social, as well as its impact across marketing segments and industries. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 332, 378 (Topic 23), Public Relations 332.

#### ADV 332C. New Media Entrepreneurialism.

Same as Public Relations 332C. Covers real life experience/exposure with a series of interviews with real-life practitioners from social media, venture capital, and others with expertise in the field. Explores important trends in digital content and digital business models; a primer for those who wish to learn about entrepreneurialism, technology, and it's intersection with media. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 332C, 378 (Topic: New Media Entrepreneurialism), Public Relations 332C, 378 (Topic: New Media Entrepreneurialism).

#### ADV 332D. Entrepreneurialism in Communication.

Same as Public Relations 332D. Project-oriented exercise where small teams conceptualize a business idea in communications, curate the insights and opinions of fellow team members, and ultimately develop a business plan around their new endeavor. A panel of local entrepreneurs will provide feedback and critique. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 332D, 378 (Topic: Entrepreneurialism in Comm), Public Relations 332D. Prerequisite: Consent of Instructor.

#### ADV 334. International Advertising.

Major issues in international advertising and advertising directed at cultural minorities within countries. Three lecture hours a week for one

semester. Prerequisite: Upper-division standing and a University grade point average of at least 2.25.

## ADV 336. Multicultural Issues in Advertising and Public Relations.

Special topics exploring the impact of the major social, economic, and cultural aspects of advertising and public relations on ethnic and cultural groups in the United States. The equivalent of three lecture hours a week for one semester. May be repeated for credit when the topics vary.

## ADV 338K. Digital Creative Portfolio.

Examines the digital landscape in advertising and beyond. Examines existing advertising work and producing an advertising project. Present and describe digital projects in collaborative group settings using terms clients will value. Three lecture hours a week for one semester. Advertising 338K and 378 (Topic 24) may not both be counted. Prerequisite: Advertising 325 with a grade of at least C, and consent of instructor.

## ADV 338L. Copywriting.

Introduction to copywriting for advertising and related industries. Develop conceptual and writing skills across a wide range of media. Enrollment in Texas Creative or previous creative writing experience preferred. Three lecture hours a week for one semester. Advertising 338L and 378 (Topic 10) may not both be counted. Prerequisite: Advertising 325 with a grade of at least C, and consent of instructor.

## ADV 339K. Digital Graphic Communication.

Same as Public Relations 339K. Introduction to the fundamentals of good graphic design, as well as production basics. Develops digital design skills using industry-standard software, from print (Adobe InDesign, Photoshop, Illustrator) to motion (Adobe Premiere, AfterEffects) and interactive (HTML, CSS, WordPress). Assumes no prior knowledge. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 339K, 378 (Topic: Digital Graphic Communication), Public Relations 339K, 378 (Topic: Digital Graphic Communication).

## ADV 339L. Brand Storytelling.

Same as Public Relations 339L. Examination of how classic elements of storytelling, semiotics, and symbolism can be used to create and manage a modern brand's story and 'meaning'. Create visual, verbal, and video examples of brand storytelling that go beyond traditional advertising and public relations. Three lecture hours a week for one semester Only one of the following may be counted: Advertising 339L, 378 (Topic: Brand Storytelling), Public Relations 339L, 378 (Topic: Brand Storytelling).

## ADV 341S. Research in Sports Communication and Media.

Same as Public Relations 341S. An introduction to advertising and public relations research and methodology for sports. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and a University grade point average of at least 2.25.

## ADV 342. Advertising Copywriting.

Copywriting for print and broadcast media. Methods for developing creative advertising concepts, strategies, and executions for print, radio, and television. Emphasis on writing rather than on art direction. Three lecture hours a week for one semester. Prerequisite: Advertising 325 with a grade of at least C, and instructor's approval of the student's previous work in advertising courses.

## ADV 343K. Portfolio I.

Basic advertising art direction and copywriting skills, including indications for graphics, headlines, and body copy. Three lecture hours

and three studio hours a week for one semester. Prerequisite: Advertising 325 with a grade of at least B, and admission to the Texas Creative program.

## ADV 344K. Advertising Research.

Introduction to social science research methods as used in advertising and marketing; emphasis on survey research and secondary data. Three lecture hours a week for one semester. Prerequisite: Upper-division standing; Advertising 318J with a grade of at least B; and Advertising 309R, Public Relations 309, or Statistics and Data Sciences 306 (or Statistics and Scientific Computation 306) with a grade of at least C-.

## ADV 345J. Advertising Media Planning Foundations.

An investigation of media-market measurements and strategies across the full spectrum of the industry; development of media communications plan. Three lecture hours and one laboratory hour a week for one semester. Prerequisite: Upper-division standing; Advertising 318J with a grade of at least B; and Advertising 309R, Public Relations 309, or Statistics and Data Sciences 306 (or Statistics and Scientific Computation 306) with a grade of at least C-.

## ADV 447. Computer Imaging Topics.

Introduction to computer graphics with applications to advertising and other disciplines. Students interact with computer systems to produce artwork and design portfolios. Three lecture hours and three laboratory hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Advertising 318J with a grade of at least B and consent of instructor received prior to registering.

## ADV 347D. Entertainment Press and Public Relations - LA.

Same as Public Relations 347D. Restricted to students admitted to the Semester in Los Angeles Program. Introduction to the roles of the news and entertainment press, and publicity, promotion and public relations in the entertainment industry. Examines how these fields are linked, integrated or in tension, and provides a historical context for understanding the press and publicity sides of the entertainment business. Explores what makes marketing/advertising, PR and journalism in the entertainment industry distinct from these practices in other realms, while examining the components of current industry and practice. Three lecture hours a week for one semester. Advertising 347D and Public Relations 347D may not both be counted. May be repeated for credit. Prerequisite: Upper-division standing.

## ADV 348S. The Business of Sports Media.

Same as Journalism 348G and Public Relations 348S. Examination of the business of sports-related media, including over-the-air television, cable, satellite television, print, radio, social media, and internet-based media, and the impact of such media on sports presentation and development, professional franchises, colleges, and conferences. Emphasis on how the business of sports media generates revenue and content, and the business models for each type of media, the challenges to such models, and the likely future changes to them. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 348S, 378 (Topic: The Business of Sports Media), Journalism 348G, 349T (Topic: The Business of Sports Media), Public Relations 348S, 378 (Topic: The Business of Sports Media).

## ADV 350. Advertising Internship.

Practical work experiences in advertising sales, creative management, and research with advertisers, agencies, media, or auxiliary services. An average of twelve hours of work a week, for a total of 180 hours a semester or summer session. Offered on the pass/fail basis only. Prerequisite: Advertising 344K and 345J with a grade of at least C in each, and a University grade point average of at least 2.25.

#### ADV 350S. Internship in Sports Media.

Same as Public Relations 350S. Restricted to Texas Program in Sports and Media students. Practical work experience in sports media. Internship to be arranged by student and approved by instructor. The equivalent of three lecture hours a week for one semester. May not be counted toward the Bachelor of Science in Advertising or the Bachelor of Science in Public Relations degrees. Offered on the pass/fail basis only. Prerequisite: Upper-division standing; a University grade point average of at least 2.25; Advertising 305S or Public Relations 305S; and three additional hours from the Sports Media Certificate approved coursework list.

#### ADV 151. Advertising Practicum.

Internship and discussion hours to be arranged. Offered on the pass/ fail basis only. Prerequisite: Advertising 350 or 468K, consent of departmental internship coordinator, and completion of department requirements for enrollment in an internship course.

#### ADV 353. Advertising and Public Relations Law and Ethics.

Same as Public Relations 353. Restricted to advertising and public relations majors. The equivalent of three lecture hours a week for one semester. Only one of the following may be counted: Advertising 353, 376, Public Relations 353, 376. Fulfills the communication and culture requirement in the College of Communication. Prerequisite: Advertising 318J with a grade of at least B and a University grade point average of at least 2.25.

#### ADV 366. Special Topics in Advertising.

Three lecture hours a week for one semester. May not be counted toward the Bachelor of Science in Advertising degree. May be repeated for credit when the topics vary.

#### ADV 368C. Advertising Senior Seminar.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Credit or registration for Advertising 344K and 345J, and written consent of instructor received prior to registering.

#### ADV 468K. Portfolio II.

Intermediate advertising art direction and copywriting; special emphasis on execution skills and concepts. Three lecture hours and three studio hours a week for one semester. Prerequisite: Advertising 343K and consent of the Texas Creative program faculty.

#### ADV 468L. Portfolio III.

Advanced advertising art direction and advertising creative concepts. Three lecture hours and three studio hours a week for one semester. With consent of instructor, may be repeated once for credit. Prerequisite: Advertising 468K and consent of the Texas Creative program faculty.

#### ADV 369. Social Media.

Same as Public Relations 369. Introduction to social networking platforms and their application in relation to media plans, brand building, and insights. Three lecture hours a week for one semester May be repeated once for credit. Only one of the following may be counted Advertising 369, 378 (Topic: Social Media), Public Relations 369, 378 (Topic: Social Media). May be repeated for credit. Offered on the lettergrade basis only. Prerequisite: Upper-division standing, a University grade point average of at least 2.25, and consent of instructor.

#### ADV 370J. Integrated Communications Management.

Cases and problems dealing with the management of advertising and promotional programs; media and creative strategies; consumer, retail, industrial, and public service applications. Three lecture hours a week for one semester. Advertising 370J and Public Relations 367 may not both be counted. Prerequisite: Advertising 344K and 345J with a grade of at least C in each; Marketing 320F or 337 with a grade of at least C; and a University grade point average of at least 2.25.

### ADV 373. Integrated Communications Campaigns.

Concept of media mix; matching product, consumer, media profiles; conception, research, planning, and execution of advertising campaigns; special emphasis on advanced copywriting, layout, and production for print and broadcast media. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 373, 373H, Public Relations 377H, 377K. Prerequisite: Advertising 370J and a University grade point average of at least 2.25.

#### ADV 373H. Integrated Communications Campaigns: Honors.

Restricted to students in the Advertising or Public Relations Honors program. The concept of media mix; matching product, consumer, and media profiles; and the conception, research, planning, and execution of advertising campaigns. Special emphasis on advanced copywriting, layout, and production for print and broadcast media. Students usually participate in major national contests involving brand development in advertising strategies. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 373, 373H, Public Relations 377H, 377K. Offered on the letter-grade basis only. Prerequisite: Upper-division standing, Advertising 370J or Public Relations 367, a University grade point average of at least 3.50, admission to the departmental honors program, and consent of the undergraduate adviser.

## ADV 475. Portfolio IV.

Designed to enhance the intellectual and philosophical framework of students in the Texas Creative program. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: Advertising 468L and consent of the Texas Creative program faculty.

## ADV 377. Advertising Media Topics.

Restricted to students admitted to the TexasMedia Program. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; Advertising 345J with a grade of at least B; and consent of instructor. Additional prerequisites vary with the topic.

Topic 1: Advanced Media Strategies. An in-depth dive into independent and group work with insights and strategies.

## ADV 377M. Media Studies.

Restricted to students admitted to the TexasMedia Program. Topics in media and its effects on advertising and public relations strategies. The equivalent of three lecture hours a week for one semester. Advertising 377M and Public Relations 377M may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; Advertising 345J with a grade of at least B; and consent of instructor; additional prerequisites vary with the topic.

**Topic 1: Advanced Media Research.** Development of data analysis skills using various analytical techniques. Three lecture hours a week for one semester. Additional prerequisite: Upper-division standing. **Topic 2: Advanced Studies in Media Sales.** Same as Public Relations 377M (Topic 2). Examination of advertising media sales beyond audience measurement techniques, and quantitative and qualitative data. The equivalent of three lecture hours a week for one semester.

Advertising 377M (Topic 2) and Public Relations 377M (Topic 2) may not both be counted. Additional prerequisite: Upper-division standing, Advertising 345J with a grade of at least C, and consent of instructor. **Topic 3: Digital Metrics.** An exploration of the evolving scope of digital metrics and analytics by looking at the three dimensions colliding in interactive media: business, communications, and technology. **Topic 5: Media Metrics.** Additional prerequisite: Upper-division standing.

**Topic 7: Media Negotiations.** Additional prerequisite: Upper-division standing.

**Topic 8: Digital Insights.** Exploration of the terminology, measurement methods, and tools necessary for developing actionable management insights for digital content creation, promotion, and public relations. **Topic 9: Media Investments.** An examination of media investments and negotiations, from both a buying and selling perspective. Investigates the activation role from all sides; the agency, vendor, and client.

**Topic 10: Media Showcase.** Research and project-based, designed to help remove the traditional and new barriers faced in the fields of media.

#### ADV 378. Advanced Studies in Advertising.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing, and additional prerequisites vary with the topic.

**Topic 4: Direct Marketing.** Additional prerequisite: Marketing 320F. **Topic 15: Creative Project: Writing.** Additional prerequisite: Advertising 325 with a grade of at least C, and consent of instructor.

Topic 26: Consumer Psychology and New Media.

**Topic 27: Advanced Media Research, Insights, and Analysis.** Additional prerequisite: Advertising 344K and consent of instructor.

### ADV 378S. Special Topics in Sports Media.

Topics in sports media related to issues in traditional and new media as they effect sports and entertainment advertising and public relations. The equivalent of three lecture hours a week for one semester, or as required by the topic. Advertising 378S and Public Relations 378S may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and a University grade point average of at least 2.25.

**Topic 1: Advertising and Public Relations for Sports.** Same as Public Relations 378S (Topic 1). Three lecture hours a week for one semester. Advertising 378S (Topic 1) and Public Relations 378S (Topic 1) may not both be counted.

**Topic 2: Legal Aspects of Sports and Media.** Same as Public Relations 378S (Topic 2). Three lecture hours a week for one semester. Advertising 378S (Topic 2) and Public Relations 378S (Topic 2) may not both be counted.

**Topic 3: Return on Investment of Sports Media.** Same as Public Relations 378S (Topic 3). Three lecture hours a week for one semester. Advertising 378S (Topic 3) and Public Relations 378S (Topic 3) may not both be counted.

**Topic 4: Analysis of Sports and Entertainment Audiences.** Same as Public Relations 378S (Topic 4). Three lecture hours a week for one semester. Advertising 378S (Topic 4) and Public Relations 378S (Topic 4) may not both be counted.

**Topic 5: Ethics and Social Issues in Sports Branding**. Same as Public Relations 378S (Topic 5). Three lecture hours a week for one semester. Advertising 378S (Topic 5) and Public Relations 378S (Topic 5) may not both be counted.

**Topic 6: Sports Audiences and Nontraditional Media.** Same as Public Relations 378S (Topic 6). Three lecture hours a week for one semester. Advertising 378S (Topic 6) and Public Relations 378S (Topic 6) may not both be counted.

**Topic 7: Contributions of Sports and Entertainment to Education and Health.** Same as Public Relations 378S (Topic 7). Three lecture hours a week for one semester. Advertising 378S (Topic 7) and Public Relations 378S (Topic 7) may not both be counted.

**Topic 8: College Sports Media.** Same as Public Relations 378S (Topic 8). An examination of the history of college sports media, with an emphasis on the evolution of sports coverage from NCAA-controlled limited broadcasting of football and basketball,to present day intercollegiate athletics coverage available via multiple outlets. **Topic 9: Sports Contract Negotiation Techniques.** Same as Public

Relations 378S (Topic 9). Strategies and techniques for successfully negotiating contracts, with a special emphasis on the negotiation of sports contracts.

**Topic 10: Leadership and Administration in Sports Organizations.** Same as Public Relations 378S (Topic 10). Designed to develop marketing skills related to events, programs, products, and facilities in the sports management field.

**Topic 11: Sports and Social Media.** Same as Public Relations 378S (Topic 11). Designed to provide an understanding of and experience with the components and best practices of social media, marketing, and communications as they relate to sports entities and the sports field as a whole.

**Topic 12: Sports Audiences.** Same as Public Relations 378S (Topic 12). An exploration of marketing innovations in sports to attract audiences, and the use of sports media by advertisers, sponsors, and other entities to target various customer groups.

## ADV 379. Integrated Communication for Sports and Entertainment.

Three lecture hours a week for one semester.

#### ADV 379H. Honors Tutorial Course.

Conference course of intensive study, planned by the Advertising Honors Committee; research and the writing of a substantial paper on a special advertising topic. Supervised individual special studies. Prerequisite: Admission to the departmental honors program and consent of the undergraduate adviser.

## ADV 179J, 279J, 379J, 479J. Advertising Problems.

Individual instruction. Some topics may require additional laboratory hours. May be repeated for credit when the topics vary. Prerequisite: Written consent of instructor received prior to registering.

Topic 1: Supervised Individual Special Studies. Supervised individual special studies for which separate courses are not available. Topic 2: Supervised Individual Creative Studies. Supervised individual creative studies for which separate courses are not available. Additional laboratory hours to be arranged.

**Topic 3: Supervised Individual Media Studies.** Supervised individual media studies for which separate courses are not available. Additional laboratory hours to be arranged. Additional prerequisite: Advertising 345J.

## Public Relations: P R

## **Lower-Division Courses**

#### P R 305. Fundamentals of Public Relations.

Restricted to non-public relations majors. An introduction to public relations history and practice. Three lecture hours a week for one semester.

## P R 305S. Introduction to Integrated Communication for Sports.

Same as Advertising 305S. Examination of the mass media industry in relation to the field of sports. Focus on the "off-the-field" industries of

advertising, marketing, and public relations that impact sports; rights fees contracts; pre-game shows; gameday production; in-stadium activities; and press coverage. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 305S, 378 (Topic 7: Integrated Communication for Sports), Kinesiology 352K (Topic: Integrated Communication for Sports), Public Relations 305S.

## P R 309. Introduction to Advertising and Public Relations Research.

Same as Advertising 309R. Restricted to advertising and public relations majors. Introduction to concepts and methods of statistics, with emphasis on analyzing personal and group behaviors. Includes exploratory data analysis, correlation and regression, descriptive statistics, sampling distributions, confidence intervals, and hypothesis testing. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 309R, 378 (Topic: Introduction to Advertising and Public Relations Research), Public Relations 309, 378 (Topic: Topic: Introduction to Advertising and Public Relations Research).

## P R 316. Creativity and American Culture.

Same as Advertising 316. A cross-disciplinary view of the creative process and creative products. The conceptual core of film, fine arts, advertising, architecture, and literature. Three lecture hours a week for one semester. May not be counted toward the Bachelor of Science in Advertising or the Bachelor of Science in Public Relations. Fulfills the communication and culture requirement in the College of Communication.

#### P R 317. Writing for Public Relations.

Restricted to public relations majors. Introduction to writing skills for the media, including readability, clarity, verification, and style. Three lecture hours and one laboratory hour a week for one semester. Prerequisite: Advertising 318J with a grade of at least B.

## **Upper-Division Courses**

## P R 320. Integrated Communication for Nonprofit Organizations.

Same as Advertising 320. Explores integrated communication and branding in a variety of nonprofit settings. Examines the strategic, integrated use of multiple communication approaches, including advertising, public relations, new media, promotions, sponsorships, and special events. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 320, 378 (Topic 17), Public Relations 320, 378 (Topic 5).

#### P R 321. Leadership and Ethics.

Same as Advertising 321. Explores leadership, communication, ethics, and the ability to lead others ethically and effectively. Examine concepts and frameworks related to skills that are integral to ethical, effective leadership. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 321, 378 (Topic 11), Public Relations 321, 378 (Topic: LEADERSHIP AND ETHICS).

## P R 322. Health Communication: Messages, Campaigns, and the Media.

Same as Advertising 322. Covers the development of effective health messages, the design of health campaigns, and investigate the role of the media in influencing people's health and perceptions of health. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 322, 378 (Topic: Health Communication), Public Relations 322.

## P R 323. Public Communication of Science and Techology.

Same as Advertising 323. Explores the rapidly growing field of science communication. Examines the intersection of science, media, and

society, focusing on media's impact on how people come to understand, perceive, and act relative to scientific issues. Special attention will be directed toward the strategic communication of science and maximizing scientists' engagement with public audiences. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 323, 378 (Topic: PUBLIC COMM OF SCIENCE/TECH), Public Relations 323, 378 (Topic: PUBLIC COMM OF SCIENCE/TECH).

### P R 324. Communicating Sustainability.

Same as Advertising 324. Focuses on persuasion in the context of environmental attitudes and behaviors. Explores how humans think about and interact with the environment, paying particular attention to climate change. Drawing on theory and examples, examines the challenges and opportunities that arise when people try to communicate about the environment and change individual attitudes and behaviors. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 324, 378 (Topic: Communicating Sustainability), Public Relations 324, 378 (Topic: Communicating Sustainability).

#### P R 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Public Relations.

Enrollment in this course is to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Public Relations; transfer credit is awarded for work in an affiliated studies program. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

#### P R 332. Technology Marketing and Advertising.

Same as Advertising 332. Explores case histories, interviews with leading technology advertising and marketing executives, and latest trends in digital advertising, both mobile and social, as well as its impact across marketing segments and industries. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 332, 378 (Topic 23), Public Relations 332.

#### P R 332C. New Media Entrepreneurialism.

Same as Advertising 332C. Covers real life experience/exposure with a series of interviews with real-life practitioners from social media, venture capital, and others with expertise in the field. Explores important trends in digital content and digital business models; a primer for those who wish to learn about entrepreneurialism, technology, and it's intersection with media. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 332C, 378 (Topic: New Media Entrepreneurialism), Public Relations 332C, 378 (Topic: New Media Entrepreneurialism).

#### P R 332D. Entrepreneurialism in Communication.

Same as Advertising 332D. Project-oriented exercise where small teams conceptualize a business idea in communications, curate the insights and opinions of fellow team members, and ultimately develop a business plan around their new endeavor. A panel of local entrepreneurs will provide feedback and critique. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 332D, 378 (Topic: Entrepreneurialism in Comm), Public Relations 332D. Prerequisite: Consent of Instructor.

#### P R 339K. Digital Graphic Communication.

Same as Advertising 339K. Introduction to the fundamentals of good graphic design, as well as production basics. Develops digital design skills using industry-standard software, from print (Adobe InDesign, Photoshop, Illustrator) to motion (Adobe Premiere, AfterEffects) and interactive (HTML, CSS, WordPress). Assumes no prior knowledge. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 339K, 378 (Topic: Digital Graphic Communication), Public Relations 339K, 378 (Topic: Digital Graphic Communication).

#### P R 339L. Brand Storytelling.

Same as Advertising 339L. Examination of how classic elements of storytelling, semiotics, and symbolism can be used to create and manage a modern brand's story and 'meaning'. Create visual, verbal, and video examples of brand storytelling that go beyond traditional advertising and public relations. Three lecture hours a week for one semester Only one of the following may be counted: Advertising 339L, 378 (Topic: Brand Storytelling), Public Relations 339L, 378 (Topic: Brand Storytelling).

#### P R 341S. Research in Sports Communication and Media.

Same as Advertising 341S. An introduction to advertising and public relations research and methodology for sports. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and a University grade point average of at least 2.25.

## P R 347D. Entertainment Press and Public Relations - LA.

Same as Advertising 347D. Restricted to students admitted to the Semester in Los Angeles Program. Introduction to the roles of the news and entertainment press, and publicity, promotion and public relations in the entertainment industry. Examines how these fields are linked, integrated or in tension, and provides a historical context for understanding the press and publicity sides of the entertainment business. Explores what makes marketing/advertising, PR and journalism in the entertainment industry distinct from these practices in other realms, while examining the components of current industry and practice. Three lecture hours a week for one semester. Advertising 347D and Public Relations 347D may not both be counted. May be repeated for credit. Prerequisite: Upper-division standing.

#### P R 348. Public Relations Techniques.

Analysis and production of print, electronic, and oral messages to achieve organizational objectives; fundamentals of media relations; Internet applications. Three lecture hours a week for one semester. Prerequisite: Upper-division standing; Advertising 318J with a grade of at least B; and one of the following with a grade of at least C: Journalism 317 or Public Relations 317.

## P R 348S. The Business of Sports Media.

Same as Advertising 348S and Journalism 348G. Examination of the business of sports-related media, including over-the-air television, cable, satellite television, print, radio, social media, and internet-based media, and the impact of such media on sports presentation and development, professional franchises, colleges, and conferences. Emphasis on how the business of sports media generates revenue and content, and the business models for each type of media, the challenges to such models, and the likely future changes to them. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 348S, 378 (Topic: The Business of Sports Media), Journalism 348G, 349T (Topic: The Business of Sports Media), Public Relations 348S, 378 (Topic: The Business of Sports Media).

#### P R 350. Public Relations Internship.

Restricted to public relations majors. Internship to be arranged by student and approved by instructor. Internship to be arranged. May be taken only once. Offered on the pass/fail basis only. Prerequisite: Advertising 344K, 345J, and Public Relations 348 with a grade of at least C in each.

#### P R 350S. Internship in Sports Media.

Same as Advertising 350S. Restricted to Texas Program in Sports and Media students. Practical work experience in sports media. Internship to be arranged by student and approved by instructor. The equivalent of three lecture hours a week for one semester. May not be counted toward the Bachelor of Science in Advertising or the Bachelor of Science in Public Relations degrees. Offered on the pass/fail basis only. Prerequisite: Upper-division standing; a University grade point average of at least 2.25; Advertising 305S or Public Relations 305S; and three additional hours from the Sports Media Certificate approved coursework list.

#### P R 151. Public Relations Internship.

Designed for students who have completed a three-semester-hour internship in public relations. Internship and discussion hours to be arranged. Offered on the pass/fail basis only. Prerequisite: Public Relations 350; consent of the public relations internship coordinator; and completion of the major requirements for enrollment in an internship course.

#### P R 352. Strategies in Public Relations.

Restricted to public relations majors. Strategies relating to public relations disciplines, including the management of external, internal, community, nonprofit, and media issues, and public relations marketing programs. Three lecture hours a week for one semester. Prerequisite: Public Relations 348 with a grade of at least C.

#### P R 353. Advertising and Public Relations Law and Ethics.

Same as Advertising 353. Restricted to advertising and public relations majors. The equivalent of three lecture hours a week for one semester. Only one of the following may be counted: Advertising 353, 376, Public Relations 353, 376. Fulfills the communication and culture requirement in the College of Communication. Prerequisite: Advertising 318J with a grade of at least B and a University grade point average of at least 2.25.

#### P R 367. Integrated Communications Management.

Public relations as a managerial problem-solving process; strategic management of programs to enhance public-organizational relationships. Three lecture hours a week for one semester. Advertising 370J and Public Relations 367 may not both be counted. Prerequisite: Advertising 344K, 345J, Marketing 320F, and Public Relations 348 with a grade of at least C in each.

#### P R 369. Social Media.

Same as Advertising 369. Introduction to social networking platforms and their application in relation to media plans, brand building, and insights. Three lecture hours a week for one semester May be repeated once for credit. Only one of the following may be counted Advertising 369, 378 (Topic: Social Media), Public Relations 369, 378 (Topic: Social Media). May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: Upper-division standing, a University grade point average of at least 2.25, and consent of instructor.

#### P R 377H. Integrated Communications Campaigns: Honors.

Restricted to students in the Advertising or Public Relations Honors Program. The concept of media mix; matching product, consumer, and media profiles; and the conception, research, planning, and execution of advertising campaigns. Special emphasis on advanced copywriting, layout, and production for print and broadcast media. Students usually participate in major national contests involving brand development in advertising strategies. Three lecture hours a week for one semester, with additional hours to be arranged. Only one of the following may be counted: Advertising, 373, 373H, Public Relations 377H, 377K. Offered on the letter-grade basis only. Prerequisite: Upper-division standing, Advertising 370J or Public Relations 367, Public Relations 352, a University grade point average of at least 3.50, admission to the Advertising or Public Relations Honors Program, and consent of the undergraduate adviser.

#### P R 377K. Integrated Communications Campaigns.

Integration of theory, research methods, and communication techniques for planning, implementing, and evaluating public relations campaigns; client proposal writing and presentation. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising, 373, 373H, Public Relations 377H, 377K. Prerequisite: Public Relations 367.

#### P R 377M. Media Studies.

Topics in media and its effects on advertising and public relations strategies. The equivalent of three lecture hours a week for one semester; additional hours may be required for some topics. Advertising 377M and Public Relations 377M may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 2: Advanced Studies in Media Sales.** Same as Advertising 377M (Topic 2). Examination of advertising media sales beyond audience measurement techniques, and quantitative and qualitative data. The equivalent of three lecture hours a week for one semester. Advertising 377M (Topic 2) and Public Relations 377M (Topic 2) may not both be counted. Additional prerequisite: Upper-division standing, Advertising 345J with a grade of at least C, and consent of instructor.

#### P R 378. Advanced Studies in Public Relations.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

Topic 3: Black Music and the Media. Topic 4: Health Communication: Theory and Practice. Topic 6: Public Relations in Entertainment.

#### P R 378S. Special Topics in Sports Media.

Topics in sports media related to issues in traditional and new media as they affect sports and entertainment advertising and public relations. The equivalent of three lecture hours a week for one semester or as required by the topic. Advertising 378S and Public Relations 378S may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing, and a University grade point average of at least 2.25.

**Topic 1: Advertising and Public Relations for Sports.** Same as Advertising 378S (Topic 1). Three lecture hours a week for one semester. Advertising 378S (Topic 1) and Public Relations 378S (Topic 1) may not both be counted.

**Topic 2: Legal Aspects of Sports and Media**. Same as Advertising 378S (Topic 2). Three lecture hours a week for one semester. Advertising 378S (Topic 2) and Public Relations 378S (Topic 2) may not both be counted.

**Topic 3: Return on Investment of Sports Media.** Same as Advertising 378S (Topic 3). Three lecture hours a week for one semester. Advertising 378S (Topic 3) and Public Relations 378S (Topic 3) may not both be counted.

**Topic 4: Analysis of Sports and Entertainment Audiences.** Same as Advertising 378S (Topic 4). Three lecture hours a week for one semester. Advertising 378S (Topic 4) and Public Relations 378S (Topic 4) may not both be counted.

**Topic 5: Ethics and Social Issues in Sports Branding.** Same as Advertising 378S (Topic 5). Three lecture hours a week for one semester. Advertising 378S (Topic 5) and Public Relations 378S (Topic 5) may not both be counted. **Topic 6: Sports Audiences and Nontraditional Media.** Same as Advertising 378S (Topic 6). Three lecture hours a week for one semester. Advertising 378S (Topic 6) and Public Relations 378S (Topic 6) may not both be counted.

**Topic 7: Contributions of Sports and Entertainment to Education and Health.** Same as Advertising 378S (Topic 7). Three lecture hours a week for one semester. Advertising 378S (Topic 7) and Public Relations 378S (Topic 7) may not both be counted.

**Topic 8: College Sports Media.** Same as Advertising 378S (Topic 8). An examination of the history of college sports media, with an emphasis on the evolution of sports coverage from NCAA-controlled limited broadcasting of football and basketball,to present day intercollegiate athletics coverage available via multiple outlets. **Topic 9: Sports Contract Negotiation Techniques.** Same as Advertising 378S (Topic 9). Strategies and techniques for successfully negotiating contracts, with a special emphasis on the negotiation of sports contracts.

#### Topic 10: Leadership and Administration in Sports Organizations.

Same as Advertising 378S (Topic 10). Designed to develop marketing skills related to events, programs, products, and facilities in the sports management field.

**Topic 11: Sports and Social Media.** Same as Advertising 378S (Topic 11). Designed to provide an understanding of and experience with the components and best practices of social media, marketing, and communications as they relate to sports entities and the sports field as a whole.

**Topic 12: Sports Audiences.** Same as Advertising 378S (Topic 12). An exploration of marketing innovations in sports to attract audiences, and the use of sports media by advertisers, sponsors, and other entities to target various customer groups.

#### P R 179, 279, 379. Public Relations Problems.

Individual instruction. Prerequisite: Public Relations 352.

#### P R 379H. Honors Tutorial Course.

Conference course of intensive study, planned by the Advertising Honors Committee; research and the writing of a substantial paper on a special public relations topic. Individual instruction. Prerequisite: Admission to the departmental honors program and consent of the undergraduate adviser.

# Department of Communication Sciences and Disorders

Because prerequisites are subject to change, students should consult the *Course Schedule* before registering.

## **Communication Sciences and Disorders: CSD**

## **Lower-Division Courses**

## CSD 306K. Introduction to Communication Disorders.

Introduction to the study of processes and disorders of speech, language, and hearing; observation in the University Speech and Hearing Center. Three lecture hours a week for one semester.

#### CSD 308K. Perspectives on Deafness.

Examination of deafness from a number of perspectives: social and psychological meanings of deafness, the deaf community, education of deaf children, sign languages, and historical trends. Three lecture hours a week for one semester. Fulfills the communication and culture requirement in the College of Communication.

#### CSD 311K. Phonetic Description of Speech.

Speech production, physiological analysis and description of speech sounds, voice quality, and voice dynamics; notation; phonetic theory; applications of phonetics. Three lecture hours a week for one semester.

#### CSD 312. Developmental Language Science.

Introduction to assessment procedures and treatment strategies for children with speech and language disorders. Three lecture hours a week for one semester. Communication Sciences and Disorders 312 and 318K may not both be counted. Prerequisite: Communication Sciences and Disorders 306K or 308K with a grade of at least C-, and Communication Sciences and Disorders 311K with a grade of at least C-.

#### CSD 313L. Hearing Science.

Acoustical, physiological, and psychological bases of normal human hearing; theories of audition; laboratory techniques in hearing science research. Three lecture hours a week for one semester.

#### CSD 113P. Hearing Science: Laboratory.

Acoustical, physiological, and psychological bases of normal human hearing; theories of audition; laboratory techniques in hearing science research. One-and-one-half laboratory hours a week for one semester.

#### CSD 314L. Sociocultural Bases of Communication.

An introduction to the influences of social and cultural factors, such as ethnicity, socioeconomic status, and geographic region, on communication acquisition and use, with a focus on cross-cultural communication issues in a diverse society. Three lecture hours a week for one semester.

#### CSD 315S. Speech Science.

Same as Linguistics 315. Neurophysiological mechanisms underlying the encoding and decoding of speech. Three lecture hours a week for one semester. Only one of the following may be counted: Communication Sciences and Disorders 315S, 358S, Linguistics 315, 358S. Prerequisite: For communication sciences and disorders majors, nine hours of lowerdivision coursework in Communication Sciences and Disorders.

## CSD 118L. Acquisition of Communicative Abilities in Children: Laboratory.

Clinical laboratory experience in child language. One-and-one-half laboratory hours a week for one semester. Prerequisite: Communication Sciences and Disorders 306K or 308K with a grade of at least C-, and Communication Sciences and Disorders 311K with a grade of at least C-.

## **Upper-Division Courses**

## CSD 331E. Instructional Methods for Deaf Students.

Restricted to communication sciences and disorders majors. Methods of assessment, curriculum organization, lesson planning, instruction, and classroom management in education of deaf children. Three lecture hours a week for one semester. Communication Sciences and Disorders 331E and Curriculum and Instruction 331E may not both be counted. Offered on the letter-grade basis only. Prerequisite: Upperdivision standing; completion of at least seventy-two hours of University coursework; credit for American Sign Language 610D (or 312K); and a minimum University grade point average of 2.50.

#### CSD 140L. Professional Issues in Communication Disorders.

Restricted to communication sciences and disorders majors. Issues in ethics, licensure, certification, and professional practice in communication disorders. One lecture hour a week for one semester. May not be counted toward a degree. Offered on the pass/fail basis only. Prerequisite: Upper-division standing and twelve semester hours of coursework in communication sciences and disorders.

#### CSD 341. Principles of Audiology.

Causes of hearing disorders; diagnostic procedures and treatment. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and Communication Sciences and Disorders 313L with a grade of at least C-.

#### CSD 350. Language and the Brain.

Same as Linguistics 350 (Topic 1). Delves into the neuroanatomical and functional operations of the major brain structures that underlie speech/ language. Subjects include hemispheric dominance for language, neurological and language breakdowns in aphasia, and brain imaging methods and studies of language representation. Prerequisite: Upperdivision standing.

#### CSD 352. Topics in Communication Sciences and Disorders.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

## CSD 358. Anatomy and Physiology of the Speech and Hearing Mechanism.

In-depth study of the anatomy and physiology of structures involved in speech, language, hearing, and swallowing. Includes anatomical and physiological mechanisms of respiration, phonation, articulation, and hearing; and the central nervous system and blood supply to the speech and hearing mechanism. Three lecture hours a week for one semester. Prerequisite: Upper-division standing, Communication Sciences and Disorders 311K with a grade of at least C-.

#### CSD 359H. Honors Tutorial Course: Reading.

Restricted to senior communication sciences and disorders majors. Intensive reading and research as planned by the departmental honors committee. Individual instruction. Prerequisite: Upper-division standing; twenty-four semester hours of coursework in communication sciences and disorders, twelve of which must be upper-division; and admission to the Communication Sciences and Disorders Honors Program.

#### CSD 360M. Communication and Deaf People.

Forms of face-to-face communication used with deaf people, including speech/listening, systems of manual communication, and natural sign language. Emphasis is on child development issues and the use of different methods in educational practice. Three lecture hours a week for one semester. Prerequisite: Upper-division standing, Communication Sciences and Disorders 308K with a grade of at least C-.

## CSD 364. Deaf Education Internship.

Restricted to communication sciences and disorders majors. Field experience in deaf education at the Texas School for the Deaf or public school programs. Directed observation and participation with teachers and students in the instructional process. The equivalent of three lecture hours a week for one semester, with additional field hours to be arranged. Communication Sciences and Disorders 364 and Curriculum and Instruction 364, 664 may not both be counted. Offered on the pass/ fail basis only. Prerequisite: Upper-division standing; completion of a minimum of seventy-two hours of University coursework; credit for American Sign Language 610D (or 312K); a minimum University grade point average of 2.50.

## CSD 367K. Introduction to Speech and Language Disorders Assessment and Treatment in Children.

Restricted to communication sciences and disorders majors. Introduction to assessment procedures and treatment strategies for children with speech and language disorders. Three lecture hours a week for one semester. Prerequisite: Senior standing and the following coursework with a grade of at least C- in each course: Communication Sciences and Disorders 306K or 308K; 311K and 313L; 312 (or 318K); 315S (or 358S) or Linguistics 315 (or 358S).

#### CSD 167M, 367M. Clinical Practicum.

Restricted to communication sciences and disorders majors specializing in audiology or speech/language pathology. Supervised clinical practicum in speech/language pathology and audiology. For 167M, one lecture hour and three practicum hours a week for one semester; for 367M, one lecture hour and nine practicum hours a week for one semester. No more than four hours of clinical practicum may be counted towards the Bachelor of Science in Communication Sciences and Disorders. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: For communication sciences and disorders majors specializing in audiology or speech/language pathology: upper-division standing, eighteen semester hours of coursework in communication sciences and disorders, a University grade point average of at least 3.00, and an upper-division grade point average of at least 3.50; additional prerequisite for audiology majors: Communication Sciences and Disorders 341 with a grade of A, credit with a grade of A or registration for Communication Sciences and Disorders 378, and consent of instructor; additional prerequisite for speech/language pathology majors: credit with a grade of A for Communication Sciences and Disorders 367K or 371, and consent of instructor.

#### CSD 367R. Clinical Research in Speech/Language Pathology.

Three lecture hours a week for one semester. Communication Sciences and Disorders 367 (Topic 2: Clinical Research in Speech Language Pathology) and 367R may not both be counted. Prerequisite: Upperdivision standing and Communication Sciences and Disorders 315S (or 358S) with a grade of at least C-.

## CSD 170, 270, 370. Clinical Research in Communication Sciences and Disorders.

Supervised participation in clinical research internships. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. A maximum of 3 hours may be counted toward the degree. May be repeated for credit.

## CSD 371. Introduction to Speech and Language Disorders Assessment and Treatment in Adults.

Restricted to communication sciences and disorders majors. Introduction to assessment procedures and treatment strategies for adults with speech and language disorders. Three lecture hours a week for one semester. Prerequisite: Senior standing and the following coursework with a grade of at least C- in each course: Communication Sciences and Disorders 306K or 308K; 311K, 313L, and 350; and 315S (or 358S) or Linguistics 315 (or 358S).

#### CSD 373. Principles of Aural Rehabilitation.

Restricted to communication sciences and disorders majors. Rationale, methods, materials, procedures, and criteria for aural rehabilitation for hearing-impaired persons. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and the following coursework with a grade of at least C- in each: Communication Sciences and Disorders 306K or 308K; 311K; 313L; 341; and 315S (or 358S) or Linguistics 315 (or 358S).

## CSD 175N. Deaf Education Seminar.

Discussion of selected topics in social, political, and educational aspects of deafness. One lecture hour a week for one semester. Communication sciences and disorders majors specializing in education of the deaf/hearing-impaired may count no more than four semester hours in this course toward the degree; communication sciences and disorders majors specializing in audiology or specializing in speech/ language pathology may count no more than two semester hours in this course toward the degree; other students with majors in the College of Communication may count no more than one semester hour in this course toward the degree. May be repeated for credit. Prerequisite: Upper-division standing.

## CSD 378. Clinical Audiology.

Differential diagnostic procedures for evaluation of auditory disorderstheoretical concepts and clinical applications. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and Communication Sciences and Disorders 341.

## CSD 378C. Evidence-based Practice in Communication Sciences and Disorders.

Examines the principles and implementation of the theory of evidencebased practice in speech-language pathology and audiology. Three lecture hours per week for one semester. Offered on the letter-grade basis only. Prerequisite: Upper-division standing and consent of instructor.

## CSD 378D. Leadership and Mentorship in Communication Sciences and Disorders.

Principles and practices of leadership and mentoring in research and clinical practice in the field of communication sciences and disorders. Three lecture hours per week for one semester. Prerequisite: Upperdivision standing and consent of instructor.

## CSD 178K, 278K, 378K. Studies in Communication Sciences and Disorders.

Restricted to communication sciences and disorders majors. Supervised individual research. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May be repeated for credit with consent of the department chair. Only three semester hours may count toward a degree in the College of Communication. No more than three semester hours may be taken on the letter-grade basis. Prerequisite: Upper-division standing; eighteen semester hours of coursework in communication sciences and disorders, including at least six hours of upper-division coursework; a University grade point average of at least 2.50; a grade point average in all College of Communication coursework of at least 3.00; and approval of a project in advance of registration.

## CSD 178L. Clinical Audiology Laboratory.

Clinical laboratory experience in audiology. One lecture hour a week for one semester. Prerequisite: Upper-division standing.

## CSD 379H. Honors Tutorial Course: Special Project.

Restricted to senior communication sciences and disorders majors. The writing of a thesis or the presentation of a creative project; final comprehensive examination. Individual instruction. Prerequisite: Communication Sciences and Disorders 359H.

# Department of Communication Studies

Because prerequisites are subject to change, students should consult the *Course Schedule* before registering.

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

## **Communication Studies: CMS**

## **Lower-Division Courses**

## CMS 301. Topics in Communication Studies.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

## CMS 306M (TCCN: SPCH 1321). Professional Communication Skills.

Designed to help students develop skills in one-on-one interactions, small group communication, and presentation skills. Basic communication theories as they relate to skill development are explored. Three lecture hours a week for one semester. Only one of the following may be counted: Communication Studies 305, 306M, 319, Speech 305, 319.

## CMS 210. Forensics Workshop.

Open to all University students. Training for participation in extracurricular speech activities, including intercollegiate debate. Two lecture hours and eight laboratory hours a week for one semester. May be taken three times for credit. May be repeated for credit.

#### CMS 310K (TCCN: SPCH 2333). Team-Based Communication.

Analysis of small-group communication: cohesiveness, social climate, role structure, leadership, conformity, dynamics of interaction; participation in small-group communication situations. Three lecture hours a week for one semester.

## CMS 313M. Organizational Communication.

Communication processes within government, private, and volunteer organizations. Three lecture hours a week for one semester.

#### CMS 314L. Language, Communication, and Culture.

The role of language in communication. Analysis of the complexity of human languages, languages in contact, language modality, and communication interaction. Three lecture hours a week for one semester.

## CMS 315M (TCCN: SPCH 1318). Interpersonal Communication Theory.

Introduction to the study of communication in relationships; topics include self-disclosure, conflict, long-distance relationships, stereotyping, and persuasion. Three lecture hours a week for one semester.

## CMS 316L (TCCN: SPCH 2316). Interviewing Principles and Practices.

Introduction to interviewing theory, emphasizing the acquisition and application of interviewing skills. Three lecture hours a week for one semester.

#### CMS 317C. Speech in American Culture.

The impact of public discourse on the ideas and issues of culture and history in the United States. Three lecture hours a week for one semester.

#### CMS 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Communication Studies.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the appropriate College of Communication department. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

## **Upper-Division Courses**

## CMS 320. Advanced Presentation Skills.

Designed to help students develop skills in delivering informative and persuasive presentations and speeches. Study of major theories related to oral presentations. Focus on audience analysis and adaptation, building strong arguments, speech organization, and use of new technologies. Three lecture hours a week for one semester. Communication Studies 320 and 367 (Topic: Advanced Presentation Skills) may not both be counted. Prerequisite: Upper-division standing and Communication Studies 306M or Communication Studies 305, with a grade of at least C-.

## CMS 321D. Communicating for Development and Philanthropy.

An exploration of the special communicative dimensions of the development and philanthropy fields, including how to apply theories of building relationships and persuasion to the context of development and philanthropy for nonprofit organizations. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

## CMS 322E. Communication Ethics.

Examination of the ethical issues involved in communication. Subjects addressed include our role in interactions we are party to; media coverage of issues of a sensitive or potentially harmful nature; and how our interactions with others reflect and shape who we are. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### CMS 323R. Rhetoric: East and West.

Examination of the ways people from different cultures communicate and argue, and how cultures use logic, stories, myth, images, and the spoken word to make their points. Three lecture hours a week for one semester. Communication Studies 323R and 367 (Topic: Rhetoric East and West) may not both be counted. Prerequisite: Upper-division standing.

#### CMS 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Communication Studies.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Communication Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

## CMS 330. Interpersonal Health Communication.

The fundamental interpersonal communication processes that are involved in managing physical and mental health. Includes stigma and illness identity, social support, patient-provider communication, endof-life care, and health education. Three lecture hours a week for one semester. Communication Studies 330 and 367 (Topic: Interpersonal Health Communication) may not both be counted. Prerequisite: Upperdivision standing.

#### CMS 331K. Speech Writing and Criticism.

Composition and analysis of oral messages; emphasis on creating and arranging ideas, style, delivery, critical method. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### CMS 332. Argumentation and Advocacy.

Nature of argumentative controversy; variables of form, method, and ethics; analysis of argumentative rhetorical works. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### CMS 332D. Digital Ethics.

Explores the ethical issues inherent in the use of digital and online media. Discusses a range of current issues and subjects through the application of important moral theories, attending to how new technologies often challenge knowledge of morality, virtue, and the good life. Analyze case studies to encourage reflection and discussion over contemporary issues in digital ethics. Subjects include the ethics of hacking, Anonymous operations, online privacy, blogging ethics, online shaming and activism, revenge pornography, online free speech, social media and virtue, as well as other contemporary topics. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### CMS 332K. Theories of Persuasion.

A study of motivational factors involved in persuasive speaking to secure belief and action. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### CMS 333. Case Studies in Argumentation.

Study of argumentation theories. Includes analysis of case studies taken from areas of law, public policy, popular culture, and history. Three lecture hours a week for one semester. Communication Studies 333 and 367 (Topic: Case Studies in Argumentation) may not both be counted. Prerequisite: Upper-division standing.

#### CMS 334K. Nonverbal Communication.

Survey of the effects of space, physical appearance, movement, eye behavior, and vocal behavior on interpersonal communication. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### CMS 335. Strategic Sales and Event Planning.

Theory and practice related to the preparation of large-scale sales events and conferences. Designed to develop communication skills and planning techniques. May include client research, investigation of potential venues, telephone-based information interviews, individual or group sales presentations, and event overviews. Three lecture hours a week for one semester. Communication Studies 335 and 367 (Topic: Strategic Sales and Event Planning) may not both be counted. Prerequisite: Upper-division standing and Communication Studies 306M or Communication Studies 305.

#### CMS 337. Building Sales Relationships.

Explores the theoretical and practical role of communication in the development of long-term client relationships. Explores the consultative sales process, including prospecting, assessing needs, handling objections, presenting, closing, and following up with clients. Focuses on how technology can help or hinder communication. Three lecture hours a week for one semester. Communication Studies 337 and 367 (Topic: Communication to Build Sales Relationships) may not both be counted. Prerequisite: Upper-division standing.

#### CMS 338. Leadership Stories.

Uses fictional and nonfictional stories, as well as examples taken from virtual reality, to explore the meaning of leadership. Designed to help students develop a conceptual, practical, and personal understanding of the meaning of leadership. Three lecture hours a week for one semester. Communication Studies 338 and 367 (Topic: Stories of Leadership) may not both be counted. Prerequisite: Upper-division standing.

#### CMS 338L. Leadership and Public Memory.

Examines how public memory is created, shaped, and shared through processes and forms like commemorations, museum exhibits, historic sites, and monuments. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### CMS 339L. Social Interaction in Virtual Environments.

Examines fundamental principles connected to the uses and effects of new technologies. Covers social networking sites, online dating, and virtual group collaboration. Three lecture hours a week for one semester. Communication Studies 339L and Communication Studies 367 (Topic: Social Interaction in Virtual Environments) may not both be counted. Prerequisite: Upper-division standing.

#### CMS 340K. Communication and Social Change.

Analysis of how persuasion is used in mass movements: civil rights, consumerism, feminism, pacifism, religious sects. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

## CMS 340M. Social Media and Social Movement: Then and Now.

Explores the role media plays in documenting and shaping the successes and failures of contemporary causes. Considers how these movements use social media to their advantage and the responses from government and other institutions. Three lecture hours a week for one semester. Communication Studies 340M and Communication Studies 367 (Topic: Social Media/Social Movement: Then/Now) may not both be counted. Prerequisite: Upper-division standing.

#### CMS 341. Digital Communications.

Uses communication and interdisciplinary perspectives to explore interactions involving technology. May include the study of impression formation, identity, surveillance, privacy, distributed teams, trust and deception, online gaming, social support, and uses and impacts of new information and communication technology. Three lecture hours a week for one semester. Communication Studies 341 and 367 (Topic: Computer-Mediated Communication) may not both be counted. Prerequisite: Upper-division standing.

#### CMS 342C. Communication and Civic Participation.

An exploration of the status of American democracy, particularly as it pertains to those born between 1960 and 1990. Subjects include the meaning of citizenship and democratic participation, and the strengths and limitations of marketing efforts targeted at getting youth involved in the democratic system. Three lecture hours a week for one semester. Communication Studies 342C and 367 (Topic: Communication and Civic Participation) may not both be counted. Prerequisite: Upper-division standing.

#### CMS 342K. Political Communication.

A study of the role of symbols in political communication and the techniques and strategies employed by politicians; special attention is given to recent election campaigns. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### CMS 344K. Lying and Deception.

Examines lying and deception as civil, strategic, and manipulative behavior. Secrets, privacy, disclosures, and confidentiality are examined in a variety of familiar contexts. Three lecture hours a week for one semester. Communication Studies 344K and 367 (Topic: Lying and Deception) may not both be counted. Prerequisite: Upper-division standing.

#### CMS 345. Media Effects and Politics.

The theoretical models and research methods used to study media effects. Emphasis on the political implications of media-effects research and on how media-effects theories can help clarify political issues. May include television violence, the political impact of the news, and the use of media for educational purposes. Three lecture hours a week for one semester. Communication Studies 345 and 367 (Topic: Media Effects and Politics) may not both be counted. Prerequisite: Upper-division standing.

#### CMS 345G. Communicating to Government.

Analyze confident, effective, and ethical communication in regards to policy makers, elected officials, legislative and governmental agencies. Discussion of legal and ethical considerations introduced by governmental communications, as well as strategies and materials for effective communication. Includes guest speakers, and interactive opportunities around the Texas legislature and/or local governmental bodies. Three lecture hours a week for one semester. Communication Studies 345G and 367 (Topic: Communicating to Government) may not both be counted. Prerequisite: Upper-division standing.

#### CMS 345K. Perspectives on Rhetoric.

Four different meanings of rhetoric; how these meanings contribute to the current understanding of communication studies. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### CMS 345N. Political Narratives.

Examines stories and how they are told during political rituals, under campaign pressures, on the nightly news, and in the daily newspaper. visually, verbally, online, and in person. Three lecture hours a week for one semester Communication Studies 345N and Communication Studies 367 (Topic: Political Narratives) may not both be counted. Prerequisite: Upper-division standing.

#### CMS 345P. Communication and Public Opinion.

An investigation of the definition and measurement of public opinion. Explores the relationship between communication and public opinion, how changes to public opinion are affected, and the influence of perception of public opinion on personal opinion. Communication Studies 345P and 367 (Topic: Communication and Public Opinion) may not both be counted. Prerequisite: Upper-division standing.

#### CMS 345V. American Voices.

Examines what is most distinctive about American speech, American film, American advertising, American politics, the American press. Three lecture hours a week for one semester. Communication 370 (Topic: American Voices) and Communication Studies 345V may not both be counted. Prerequisite: Upper-division standing.

## CMS 346. Using Communication Technology at Work.

Examines how communication technologies affect workplace communication. Considers case studies involving the use of social networking, handheld devices, and e-mail by for-profit and nonprofit organizations. Three lecture hours a week for one semester. Communication Studies 346 and 367 (Topic: Using Communication Technology at Work) may not both be counted. Prerequisite: Upperdivision standing.

## CMS 347E. Arguing the End of the World.

Discussion of apocalyptic, millenarian, or millenialism way of thinking and how it affects religious, social, and other personal beliefs. The equivalent of three lecture hours a week for one semester. Communication Studies 347E and 367 (Topic: Arguing the End of the World) may not both be counted. Prerequisite: Upper-division standing.

#### CMS 347K. Rhetoric of Popular Culture.

The ways that film, television, music, fashion, the Internet, and other discourses of popular culture influence public attitudes, perceptions, and social relations. Three lecture hours a week for one semester. Communication Studies 347K and 367 (Topic: Rhetoric of Popular Culture) may not both be counted. Prerequisite: Upper-division standing.

#### CMS 348. Communication Research Methods.

A practical introduction to research methods, focusing on designing a study, conducting research, analyzing data, and presenting results. Studies survey design, interviews, focus groups, and experiments. Three lecture hours a week for one semester. Communication Studies 348 and 367 (Topic: Communication Research Methods) may not both be counted. Prerequisite: Upper-division standing.

#### CMS 348K. Visual Media and Interaction.

The role of visual resources and symbols in social interaction and public life; the representation of interaction and human relationships in visual media (photography, advertising, fine arts, and film). Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### CMS 349M. Advanced Analysis of Popular Culture.

Advanced critique and analysis of rhetorical dimensions in texts of popular culture. Readings in theory and methods for understanding persuasive influence in television, film, music videos, and the Internet. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### CMS 350C. Crowds, Clouds, and Community.

Explores the use of social network theory and analysis to understand the connectivity and complexity of teams, families, organizations, and communities. Consider examples of network analytic approaches to theorize, visualize, analyze, and understand, for example, criminal networks, professional service firms, government contracting, social media platforms, virtual worlds, interorganizational dynamics, post disaster recovery, and ad hoc organizational forms. Three lecture hours a week for one semester. Communication Studies 350C and 367 (Topic: Crowds/Clouds/Community) may not both be counted. Prerequisite: Upper-division standing.

#### CMS 350M. Field Study in Organizational Communication.

Students acquire information through interviews and observation, devise appropriate coding schemes, and compose synoptic reports of their findings and recommendations. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

## CMS 351. Communication for Cooperation and Competition.

Theoretical perspectives and experiential learning on the ways people reconcile the need to be individualistic (competitive) with the need to be community members (cooperative). Individual aggression and submission; the rewards of competition and cooperation; and organizational structures that lead to cooperation and competition. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### CMS 352. Organizational Leadership.

Theories, styles, and components of organizational leadership; communication behaviors of leaders in organizations. History of the study of leadership; new theories and concepts related to leaders as managers of organizational culture and change. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### CMS 353C. Communication for Innovation.

Examines the critical role that communication and communicative processes play in developing innovative ideas, products, and ways of approaching problems. Analyze behavioral theories and empirical studies to understand the challenges associated with facilitating innovation in organizations and learn strategies for improving work effectiveness. Subjects include motivation, decision making, organizational culture, information sharing, and idea generation. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### CMS 353S. Social Media and Organizations.

Explores the relationship between social media use and organizational communication. Subjects include how organizations use social media for communication with external stakeholders and to facilitate internal communications processes. Three lecture hours a week for one semester. Communication Studies 353S and 367 (Topic: Social Media and Organizations) may not both be counted. Prerequisite: Upper-division standing.

### CMS 354. Conflict Resolution.

Systematic analysis of conflict and communication to examine some of the effects of communication on conflict and of conflict on communication. Readings, analysis of conflicts, and practice with and evaluation of communication behaviors thought to be effective in conflict talk. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### CMS 355K. Intercultural Communication.

Theories of speech and language that concern interaction between persons from different cultures who speak different languages or dialects. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### CMS 355T. Communication and Thought.

Integrates the emergence of collaborative thought from human communication. Analysis of language and communicative development, conversational pragmatics, perspective-taking, and social network analysis. Three lecture hours a week for one semester. Communication Studies 355T and 367 (Topic: Communication and Thought) may not both be counted. Prerequisite: Upper-division standing.

#### CMS 357. Family Communication.

Some of the common issues that face those who live in, counsel, and conduct research with families. The development of traditional families in the United States, different family structures that make up modern society, current issues that affect families, and the impact of communication on family experiences. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

## CMS 358. Communication and Personal Relationships.

The nature of human interaction in various types of relationships (friends, dates, spouses, roommates), the nature of communication at different stages in a relationship, and the nature of communication at different life stages. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

## CMS 359. Language, Culture, and Communication of Hip-Hop.

Uses hip-hop music as a model for understanding a speech community. Focuses on language innovation and the creation of new social networks, forms of communication, and cultural meaning and values. Three lecture hours a week for one semester. Communication Studies 359 and 367 (Topic: Language, Culture, and Communication in the Hip-Hop Nation) may not both be counted. Prerequisite: Upper-division standing.

## CMS 359C. Inside the American Conversation.

A look at a handful of conversations in America, from phone calls between family members and dating couples in the 1980s, contemporary 'hybrid' face-to-face/cell-phone conversations to interviews with Donald Trump and 'The Wire'. Explores what these conversations tell us about social life and how it changes, about people's concerns, cultural difference, and the diversity of ways of using language that is a hallmark of American society. Three lecture hours a week for one semester. Communication Studies 359C and 367 (Topic: Inside the American Conversation) may not both be counted. Prerequisite: Upper-division standing.

#### CMS 359H. Honors Tutorial Course: Reading.

Intensive reading and research as planned by the departmental honors committee. Individual instruction. Prerequisite: Upper-division standing and admission to the Communication Studies Honors Program.

#### CMS 360. Analyzing Social Interaction.

Introduction to concepts and research methods related to the study of how verbal and nonverbal communication is used in everyday situations. Includes collecting and analyzing sound and video data. Designed to help students develop skills in interpreting human social interactions. Three lecture hours a week for one semester. Communication Studies 360 and 367 (Topic: Language and the Body in Social Interaction) may not both be counted. Prerequisite: Upper-division standing.

#### CMS 360W. Work360.

An introductory exercise to the life-long process of discovering a career. Discussion of communication tools, such as developing an elevator pitch to strategies for different interview types and skillsets, best practices on organizational entry and exit, and effective networking. Three lecture hours a week for one semester. Only one of the following may be counted: Communication Studies 336D, 360W, 367 (Topic: Work360). Prerequisite: Upper-division standing.

#### CMS 364K. Gender and Communication.

Focuses on how communication influences ideas about sex, gender, and identity, from interpersonal relationships to the mass media, and from legislative debates to social movements. Three lecture hours a week for one semester. Communication Studies 364K and 367 (Topic: Gender and Communication) may not both be counted. Prerequisite: Upper-division standing.

#### CMS 164M, 264M, 364M. Pre-Graduate School Mentorship.

Introduction for undergraduates to graduate study in a discipline of their choosing. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. With consent of the department chair, may be repeated for credit, but no more than three hours may be taken. Prerequisite: Consent of instructor.

#### CMS 365K. Male-Female Communication.

Same as Women's and Gender Studies 345 (Topic 21: Male-Female Communication). Studies of speech patterns related to the concepts of male and female, including sexism in speaking, patterns of male and female speaking, patterns of listening to males and females, speech in courtship and family, speech and sexual discrimination in careers. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### CMS 365L. Communication, Controversy, and Citizenship.

Designed to help students develop the listening, speaking, and argumentation skills used to deliberate over controversial and sensitive subjects. Deliberations focus primarily on the meaning of citizenship. Three lecture hours a week for one semester. Communication Studies 365L and 367 (Topic: Communication, Controversy, and Citizenship) may not both be counted. Prerequisite: Upper-division standing.

#### CMS 366. Rhetoric, Love, and Democracy.

Covers ideas about human symbolism and discourse; focuses on the effects of rhetorical perspectives on how people make meaning of the world. Three lecture hours a week for one semester. Communication Studies 366 and 367 (Topic: Love, Democracy, and Rhetoric) may not both be counted. Prerequisite: Upper-division standing.

#### CMS 366C. Celebrity Culture.

Examines the importance of fame and celebrity throughout the nineteenth, twentieth, and twenty-first centuries, in relation to education, entertainment, and politics. Three lecture hours a week for one semester. Communication Studies 366C and 367 (Topic: Celebrity Culture) may not both be counted. Prerequisite: Upper-division standing.

#### CMS 366D. Rhetoric of Horror.

A survey of horror studies keyed specifically to rhetorical issues, or the ways in which horror literature, cinema, and television influence people by rehearsing social problems in disguise. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### CMS 366F. Rhetoric of Film.

Film theory and history taught from a rhetorical perspective. Covers the film industry, technology, and the elements of narrative, image, and sound. Emphasis on theory about film and film criticism. Three lecture hours a week for one semester. Communication Studies 366F and 367 (Topic: Rhetoric of Film) may not both be counted. Prerequisite: Upperdivision standing.

#### CMS 366M. Rhetoric and Popular Music.

Explores music and its relation to identity; how gender, race, and sexual identity are constructed with and within musical texts; meanings and importance of authenticity; and the effectiveness of music as a political tool. Three lecture hours a week for one semester. Communication Studies 366M and 367 (Topic: Rhetoric and Popular Music) may not both be counted. Prerequisite: Upper-division standing.

#### CMS 366R. Religious Communication and Paranormalism.

Explores secular and religious instances of ambivalence, and its uses and effects. Three lecture hours a week for one semester. Communication Studies 366R and 367 (Topic: Rhetoric and Religion) may not both be counted. Prerequisite: Upper-division standing.

#### CMS 367. Topics in Communication Studies.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites vary with the topic.

#### Topic 1: Applied Interpersonal Communication.

Topic 2: Campaign Communication.

**Topic 3: Communication and Thought.** Investigates the emergence of collaborative thought from human communication.

**Topic 5: Ethnography of Live Music in Austin.** Explores music and musicians in Austin, with a focus on ethnographic research through observation, interviews, analysis, and writing.

**Topic 6: Pragmatism and Group Dynamics.** Explores how individual beliefs and expectations determine the quality of group communication.

#### CMS 370K. Internship in Communication Studies.

Restricted to communication studies majors. Focuses on career goals of students through classroom discussions and places students in communication positions with public and private organizations. The equivalent of three lecture hours a week for one semester. Offered on the pass/fail basis only. Prerequisite: Upper-division standing; twelve semester hours of communication studies with a grade of at least C-; a University grade point average of at least 2.25; a grade point average in communication coursework of at least 2.25; and consent of instructor.

#### CMS 371D. Difficult Conversations.

Explores the interpersonal, social, and language factors that impact difficult conversations. Three lecture hours a week for one semester.

Communication Studies 367 (Topic: Difficult Conversations) and 371D may not both be counted. Prerequisite: Upper-division standing.

#### CMS 371K. Practicum in Conflict Mediation.

Provides hand on training and practice in conflict intervention techniques, including various forms of mediation, facilitation and dialogue. Two lecture hours and three discussion hours a week for one semester. Prerequisite: Upper-division standing.

#### CMS 171M. Communication Studies Internship.

Internship and discussion hours to be arranged. Offered on the pass/ fail basis only. Prerequisite: Communication Studies 370K; consent of departmental internship coordinator; and completion of departmental requirements for enrollment in an internship course.

#### CMS 372D. The Politics of National Memory.

Explores issues of power in our nation's capital. Students study Washington, DC via visits to sites around the city. One three-hour field trip a week for one semester. Taught in Washington, DC. Communication Studies 372D and 374D may not both be counted. Prerequisite: Consent of the department.

#### CMS 372K. Advanced Organizational Communication.

In-depth discussion and treatment of advanced organizational communication topics, including socialization and role development, workplace attachments, organizational culture, ethics, structure, conflict, power, decision making and empowerment, technology, and various forms of external communication with relevant organizational stakeholders. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and Communication Studies 313M with a grade of at least C-.

#### CMS 372T. Time Matters.

An exploration of twentieth and twenty-first century time management issues resulting from the development of communication technologies. Subjects include the concept of twenty-four-hour, seven-day-aweek availability; information overload; increased work hours; sleep deprivation; hurry sickness; multitasking; the human experience of time across diverse social, cultural, and historical contexts; and other time-related issues that shape, and are shaped by, communication behaviors. Three lecture hours a week for one semester. Communication Studies 367 (Topic: Time Matters) and 372T may not both be counted. Prerequisite: Upper-division standing.

#### CMS 373D. Advocacy and Politics.

An introduction to the issues faced when advocating for an issue, idea, or one's self. The course aims to have students grasp concepts they will see and experience during their internship in Washington, DC. Eight conference hours a day for six days, for the equivalent of three lecture hours a week for one semester. Taught in Washington, DC. Prerequisite: Consent of the department.

#### CMS 177K, 377K, 477K. Faculty-Initiated Research.

Supervised research on a project designed by a faculty member. Individual instruction. No more than six semester hours in the following courses may be counted: Communication Studies 177K, 377K, 477K, 178K, 278K, 378K, 478K, 578K, 678K. Prerequisite: Upper-division standing, twelve semester hours of coursework in communication studies, a University grade point average of at least 2.50, and consent of instructor and the department.

## CMS 178K, 278K, 378K, 478K, 578K, 678K. Student-Initiated Research.

Supervised independent research on a project initiated, designed, and implemented by the student. Student secures consent of a faculty

member willing to supervise the project prior to registering. Individual instruction. No more than six semester hours in the following courses may be counted: Communication Studies 177K, 377K, 477K, 178K, 278K, 378K, 478K, 578K, 678K. Prerequisite: Upper-division standing, twelve semester hours of coursework in communication studies, a University grade point average of at least 2.50, and consent of instructor and the department; Communication Studies 177K, 377K, 477K is recommended.

## CMS 379H. Honors Tutorial Course: Special Project.

The writing of a thesis or the presentation of a creative project; final comprehensive examination. Individual instruction. Prerequisite: Communication Studies 359H.

## School of Journalism

Journalism majors may not register for more than nine semester hours in journalism in one semester or summer session. The director or associate director may make exceptions to this rule for seniors who need additional journalism courses in order to graduate on time.

Any student enrolled in a journalism course who does not attend the first class meeting or laboratory session may be dropped from that course.

Because prerequisites are subject to change, students should consult the *Course Schedule* before registering.

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

## Journalism: J

## **Lower-Division Courses**

## J 301F. Fundamental Issues in Journalism.

Examination of major issues facing the news media in a democratic society and the exploration of digital technology on the future of news gathering, including ethics, institutions, effects, and standards of journalistic performance. Three lecture hours a week for one semester.

## J 302F. Digital Storytelling Basics.

Explores the mindsets and skill sets of digital journalism. Covers subjects like: how technology helps journalists do their jobs; how traditional journalistic values and ethics relate to the digital world; how to explore new trends in journalism; how to report and tell stories in multiple ways; and how to be comfortable with analyzing and engaging online audiences. Three lecture hours and one and one-half laboratory hours a week for one semester.

#### J 308C. Sports, Media, and Society.

Restricted to non-journalism majors. An examination of historical and contemporary issues regarding the sporting world's interaction with media production, including journalism, talk radio and social media. Three lecture hours a week for one semester.

#### J 308D. Data, Privacy, and You.

Restricted to non-journalism majors. Explores approaches to understanding what some have termed 'datafication'. Covers literacy of these types of data as well as the ways in which these data are transmitted, stored, compiled, aggregated, analyzed, and used in predictive analytics. Examines privacy aspects in terms of the increased blurring between the private and public in spaces such as social media and explores the implication of this on news production and consumption. Three lecture hours a week for one semester.

#### J 308F. Analyzing Media Bias.

Restricted to non-journalism majors. Critical analysis of the ways news is presented, misrepresented and critiqued, with an emphasis on perceived bias in the news media. Three lecture hours a week for one semester.

#### J 308J. Becoming Citizen Journalists.

Restricted to non-journalism majors. Covers the basics of journalism for students who are interested in sharing truthful stories to a public audience, but do not intend to pursue a career in the profession. Uses digital and social media tools. Explores three subjects: how to find and gather the best factual information, how to present it in clear and engaging ways, and how to make ethical decisions that serve the needs of the audience and democracy. Three lecture hours a week for one semester. Journalism 308J or 358C may not both be counted.

#### J 308M. Society, Media, and Identity.

Restricted to non-journalism majors. An analysis of how U.S. media especially the news industry, film, television and social media - influence culture, and vice versa. Uses readings and observation to recognize that the stories media tell influence identities such as race, ethnicity, gender, religion and sexual orientation. Three lecture hours a week for one semester.

#### J 308T. Topics in Journalism.

Restricted to non-journalism majors. Contemporary social, political, and intellectual concerns in the practice of journalism and media. Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### J 310F. Reporting: Words.

Reporting, writing, and editing skills for print, online, mobile, and broadcast. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: Journalism 301F and 302F with a grade of at least C- in each.

## J 310K. Visual Literacy.

Introduction to the visual concerns of message design and interpretation, including their bases in theories of visual perception, semiotics, and media practice. Three lecture hours a week for one semester.

#### J 311F. Reporting: Images.

Video and images for web and broadcast, including design principles, visual perception, typography, manipulation of images, and photographs. One and one-half lecture hours and three laboratory hours a week for one semester. Journalism 311F and 318C may not both be counted. Offered on the letter-grade basis only. Prerequisite: Journalism 301F and 302F with a grade of at least C- in each.

#### J 313P. Multimedia News Reporting.

Restricted to non-journalism majors. Skills-based introduction to journalistic forms of news gathering and writing. Gaining the tools for journalism storytelling. One-and-one-half lecture hours and three laboratory hours a week for one semester.

#### J 313S. Topics in Texas Sports and Media.

Introduction to various contemporary and historical issues, emphasizing interdisciplinary perspectives and critical discourse. Three lecture hours a week for one semester. Communication 310 and Journalism 313S may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

#### J 315R. Contemporary Representation in Media.

Restricted to non-journalism majors. An examination of how underrepresented and marginalized groups are portrayed in the news media. Three lecture hours a week for one semester.

#### J 317. Journalism Practices.

Restricted to public relations majors. Introduction to writing skills for the media, including readability, clarity, verification, and style. Three lecture hours a week for one semester. Prerequisite: Advertising 318J with a grade of at least B.

### J 318P. Podcasting.

Restricted to journalism majors. Examination and practice of writing and reporting news for audio broadcasts, including podcasts. Three lecture hours and three laboratory hours a week for one semester. Only one of the following may be counted: Journalism 318P, 322D, 331G. Prerequisite: Journalism 310F with a grade of at least B-.

#### J 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Journalism.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the School of Journalism. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

## **Upper-Division Courses**

## J 320F. Covering Law Enforcement and Courts.

Restricted to journalism majors. Specialized reporting, research, and writing skills for investigating and covering incidents and issues occurring in law enforcement, public safety, and criminal justice. Three lecture hours a week for one semester. Prerequisite: Journalism 310F (or 320D) and 311F (or 321C) with a grade of at least B- in each.

## J 321F. Reporting on City and County Government.

Restricted to journalism majors. Basic beat reporting skills to navigate city and county governments, and conducting reporting, research, and writing on issues and people at the local level. Three lecture hours a week for one semester. Prerequisite: Journalism 310F (or 320D) and 311F (or 321C) with a grade of at least B- in each.

## J 322F. Navigating State Government.

Restricted to journalism majors. Training and instruction in specialized reporting, research, and writing skills as applicable to covering state governments. Analysis of enduring issues and politics at the state level. Fieldwork at the Texas Capitol and state agencies. Three lecture hours a week for one semester. Prerequisite: Journalism 310F (or 320D) and 311F (or 321C) with a grade of at least B- in each.

## J 322J. Reporting Social Justice.

Restricted to journalism majors. Explore how to cover such social justice issues as poverty, inequality and disenfranchisement and the skills needed to research, report and write on people in underrepresented communities. Three lecture hours a week for one semester. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each.

#### J 322P. Reporting Public Issues.

Restricted to journalism majors. Specialized reporting, research and writing skills for covering government institutions and public policies. Three lecture hours a week for one semester. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each.

#### J 323F. Education Reporting.

Restricted to journalism majors. Covering school districts and higher education to produce stories that humanize the bureaucracy of public education and compellingly depict issues, structures, and policies. Three lecture hours a week for one semester. Prerequisite: Journalism 310F (or 320D) and 311F (or 321C) with a grade of at least B- in each.

#### J 324C. Reporting Consumer News.

Restricted to journalism majors. Emphasizes writing and reporting for consumers, finding and honing stories that help people thrive. Practice in writing creative, relevant and vivid descriptions that tell an engaging story. Analysis of community perspective, public sourcing, what's possible, and interdependent dramatic arc. Uses journalistic skills to reward an audience, adapt to a community, and push the envelope. Three lecture hours a week for one semester. Journalism 324C and 349T (Topic: Reporting Consumer News) may not both be counted. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each.

#### J 324F. Business and Financial Reporting.

Restricted to journalism majors. Instruction in how to conceptualize, source, and prepare news reports on global financial markets, commercial transactions, and company performance. The course is global, with the United States a subset of the material covered. Handson course during which students produce multiple news packages for publication. Three lecture hours a week for one semester. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each.

#### J 325F. Covering Politics.

Restricted to journalism majors. Specialized research, reporting, and writing skills to cover politics, elections, and candidates. Three lecture hours a week for one semester. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each.

#### J 326C. Introduction to Coding for Journalists.

Restricted to journalism majors. The basics of coding for journalism. Learn necessary coding skills to perform in digital newsrooms, from simple things like interactive news graphics to more sophisticated tools like machine learning. Three lecture hours a week for one semester. Journalism 326C and 339T (Topic: Introduction to Coding for Journalists) may not both be counted. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each.

#### J 326F. Reporting Sports.

Restricted to journalism majors. Contemporary professional skills and techniques in sports journalism. Three lecture hours a week for one semester. Prerequisite: Journalism 310F (or 320D) and 311F (or 321C) with a grade of at least B- in each.

## J 326S. Advanced Topics in Texas Sports and Media.

Restricted to journalism majors. Critical assessment of various contemporary and historical issues, emphasizing interdisciplinary perspectives. Three lecture hours a week for one semester. Communication 320 and Journalism 326S may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Journalism 310F (or 320D) and 311F (or 321C) with a grade of at least B- in each.

#### J 327D. Reporting With Data.

Restricted to journalism majors. An investigation of the basics of computer-assisted reporting. Subjects include finding compelling data sets; cleaning and analyzing the contents; using data visualization and simple statistical models to accurately report based on the data; and presenting results online through stories, charts and maps. Three lecture hours a week for one semester. Journalism 327D and 333F may not both be counted. Offered on the letter-grade basis only. Prerequisite: Upper-division standing and Journalism 310F (or 320D) with a grade of at least B- .

## J 328D. Advanced Reporting with Data.

Restricted to journalism majors. Advanced data-assisted reporting, with sophisticated use of data sets and visualization to present news and information. Three lecture hours a week for one semester. Prerequisite: Journalism 327D (or 333F) with a grade of at least B-.

## J 328L. Reporting Latino/a Communities.

Restricted to journalism majors. Production of multimedia news stories in Spanish or English for a local news audience. Reports on issues facing Latino/a communities from international, national, state and local levels. Three lecture hours a week for one semester. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each.

## J 328S. Reporting en Espanol.

Restricted to journalism majors. Spanish-language news in the U.S. offers important possibilities for public service journalism. Production of multimedia news stories in Spanish for a local audience. Discusses issues facing the local Latino population from the international, to national, to state and local levels. Includes weekly pitch meetings, rewrites, photography and digital storytelling. Students must be fluent in Spanish. Three lecture hours a week for one semester. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each.

#### J 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Journalism.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the School of Journalism. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

## J 329T. Topics in Public Affairs Reporting.

Restricted to journalism majors. Contemporary social, professional, and intellectual concerns in the practice of public affairs reporting. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Journalism 310F (or 320D) and 311F (or 321C) with a grade of at least B- in each.

## J 330C. Television Reporting.

Restricted to journalism majors. Basic television newsgathering skills, including shooting and editing videotape, planning and executing visual storytelling, and writing news packages. Students assist in a weekly news broadcast. One-and-one-half lecture hours and three laboratory hours a week for one semester. Journalism 330C and 330F may not both be counted. Offered on the letter-grade basis only. Prerequisite: Upper-division standing; Journalism 310F and 311F with a grade of at least B-in each; and Journalism 318P or 331G (or 322D) with a grade of at least C-.

## J 330G. Creative Nonfiction for Magazines and Books.

Restricted to journalism majors. Reporting and writing skills for narrative nonfiction, including writing book proposals, magazine pitches, and sample chapters. Three lecture hours a week for one semester. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each.

## J 330J. Advanced Photo Editing and Design.

Restricted to students in the Maymester Abroad Program. Explores intensive photographic reportage and documentation using the camera

as a tool of investigation and interaction. Emphasis on creation of photo stories, photo essays, and feature stories, with editing and page layout. Taught abroad; location may vary by semester. Only one of the following may be counted: Journalism 330J, 370K (Topic 1: Advanced Photo Editing and Design), 395 (Topic 2: Advanced Photo Editing and Design).

## J 330L. Community Life: Documented.

Restricted to students in the Maymester Abroad Program. Explores video filmmaking in a multicultural, diverse city. Emphasis on learning the steps of producing a short documentary with a small group of students, then posting the final films on personal portfolio websites. Taught abroad; location may vary by semester.

## J 331. Web Publishing.

Advanced skills in web design and in publishing multimedia content. Emphasis on collaborative work in creating an ongoing web information product. Three lecture hours a week for one semester. Prerequisite: Journalism 310F and 311F with grade of at least B- in each.

## J 331D. Intermediate Photographic Communication.

Intermediate level photograph skills and techniques. Evaluation of recent trends, visual design, and use of images in the media. Students must provide their own digital 35-mm format camera. Three lecture hours and one-and-one-half laboratory hours a week for one semester. Prerequisite: Communication 316 with a grade of at least C-.

## J 331G. Audio Storytelling.

Examination and practice of writing news for podcast. Three lecture hours and three laboratory hours a week for one semester. Only one of the following may be counted: Journalism 318P, 322D, 331G. Prerequisite: Journalism 310F with a grade of at least B- in each.

## J 331J. Studio Photography.

An investigation of the principles of studio lighting, theory and practice of contemporary color, location lighting, and production of portfolioquality work, as applicable to advertising, photographic illustration, and photojournalism. Three lectures and three laboratory hours a week for one semester. Journalism 331J and 371K (Topic 2: Studio Photography) may not both be counted. Prerequisite: Communication 316 with a grade of at least C-.

## J 331M. Media Innovation and Entrepreneurship.

Learn how the digital revolution has disrupted the media industry, creating opportunities for entrepreneurial, innovative initiatives. Study cases of successful media startups, and develop a startup project, using digital technologies and human-centered design. Three lecture hours a week for one semester. Only one of the following may be counted: Journalism 331F, 331M, or 359T (Topic: Entrepreneurial Journalism). Prerequisite: For journalism majors, Journalism 310F with a grade of at least B-; for others, six semester hours of upper-division coursework.

## J 332D. Web Production and Editing.

How to plan, edit, package and publish multimedia news. Includes ethical news curation; use of social media to drive audience growth; and leveraging web content into the print product. Three lecture hours a week for one semester. Journalism 332D and 332F may not both be counted. Offered on the letter-grade basis only. Prerequisite: Journalism 310F with a grade of at least B-.

## J 332G. Explanatory Journalism: Storytelling in a Digital Age.

Examination of the evolution of long-form explanatory storytelling from print and film to new forms of Web-based and interactive storytelling. Three lecture hours a week for one semester. Journalism 332G and 359T (Topic: Explanatory Journalism: Storytelling in a Digital Age) may not both be counted. Prerequisite: Journalism 310F with a grade of at least B-.

## J 332J. Sports for Reporting Texas.

Restricted to journalism majors. Students work as sports reporters for the School of Journalism's Reporting Texas Web site. Three lecture hours a week for one semester. Additional hour(s) to be arranged. Journalism 332J and Journalism 339T (Topic: Sports for Reporting Texas) may not both be counted. Prerequisite: Journalism 310F (or 320D) and 311F (or 321C) with a grade of at least B- in each.

## J 333G. Advanced Visual Journalism: Photo.

Explores intensive photographic reportage and documentation using the camera as a tool of investigation and interaction. Emphasis on creation of photo stories, photo essays, and feature stories, with editing and page layout. Three lecture hours a week for one semester. Prerequisite: Communication 316 with a grade of at least C.

## J 333J. Photography for Reporting Texas.

Restricted to journalism majors. Students work as photographers for the School of Journalism's Reporting Texas Web site. Three lecture hours a week for one semester. Additional hour(s) to be arranged. Only one of the following may be counted: Journalism 333J, 359T (Topic: Photography for Reporting Texas), or 363V. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each; Communication 316 with a grade of at least C.

## J 334. Multimedia Journalism.

Review of online reporting techniques, advanced multimedia skills, and current issues in new media. Three lecture hours a week for one semester. Prerequisite: Journalism 310F and 311F with a grade of at least C- in each.

## J 334F. Oral History as Journalism.

Instruction in the use of oral history to generate journalistic coverage. Modules include concepts and methods of gathering oral history; illustration of the techniques using the Vietnam War as a topic; and generating oral history-based coverage focusing on the Mexican American experience. Three lectures hours a week for one semester. Prerequisite: Journalism 310F with a grade of at least B-.

## J 334G. Advanced Visual Journalism: Video.

Explores intensive video reportage and documentation using the camera as a tool of investigation and interaction. Emphasis on creation of video news and feature stories. Three lecture hours a week for one semester. Only one of the following may be counted: Journalism 334G, 370K, 371K. Prerequisite: Communication 316 with a grade of at least C; and Journalism 310F and 311F with a grade of at least B- in each.

## J 334J. Web Publishing for Journalism.

Restricted to journalism majors. Provides students with an upto-date understanding of the Web publishing process, including conceptualization, production, and marketing. Three lecture hours a week for one semester. Journalism 334J and 339T (Topic: Web Design for Journalism) may not both be counted. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each.

## J 334N. Oral History in Multimedia Storytelling.

Instruction in the use of oral history to generate long-term archival material and short-term multimedia stories. Covers concepts and methods of gathering oral history; centering on U.S. Latinos; and ways to build a multimedia representation of the interview. Three lecture hours a week for one semester.

## J 334S. Place and Audio Storytelling.

Learning how to find the essence of a specific location and tell its story. Audio recording/editing, infographics, and photographs will be the tools used. Three lecture hours a week for one semester. Prerequisite: For journalism majors: Journalism 310F with a grade of at least B-; for others: consent of instructor.

## J 335. Narrative Journalism.

Development and production of stories for publication, focusing particularly on underrepresented groups and issues. Three lecture hours a week for one semester. Only one of the following may be counted: Journalism 335, Latin American Studies 322 (Topic 11: Latino Community Journalism), 322 (Topic 11: Narrative Journalism), Mexican American Studies 374 (Topic 4: Latino Community Journalism), 374 (Topic 4: Narrative Journalism). Prerequisite: Journalism 310F with a grade of at least B-.

## J 335D. Making Magazines.

Includes simulated publication teams that craft a concept, develop a business plan, and create a prototype. Focus on market research, writing, team building, design and production skills. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each.

## J 335F. Magazine Writing and Production.

Restricted to journalism majors. Instruction in and supervised practice of magazine reporting and production. Three lecture hours a week for one semester. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each.

## J 335G. Advanced Television Reporting and Producing.

Restricted to journalism majors. Advanced writing and reporting skills for the collaborative production of television news programs on deadline. Students assist in producing a television news program. One and a half lecture hours and three laboratory hours a week for one semester. Journalism 363C and 335G may not both be counted. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each, and credit or registration for Journalism 330C (or 330F) with a grade of at least C-.

## J 335J. Mobile Programming for Journalists.

Restricted to journalism majors. Coding and other skills in preparation for designing mobile news apps. Three lecture hours a week for one semester. Journalism 335J and 339T (Topic: Introduction to Mobile Programming for Journalists) may not both be counted. Offered on the letter-grade basis only. Prerequisite: Journalism 310F with a grade of at least B-.

## J 336D. Graphic Design for Print and Online.

Overview, design, and production of materials for online and print storytelling. Subjects include design principles, visual perception, typography, manipulation of images and photographs, and page design for media platforms. Three lecture hours a week for one semester. Journalism 303F and 336D may not both be counted. Prerequisite: Journalism 310F or Communication 316 with a grade of at least B-

## J 336F. Social Media Journalism.

The role of journalism in emerging digital social networks, examining current and traditional theories about social media as a form of journalism. Practice in the use of live chatting, tagging, geotagging, wikis, Twitter, Flickr, and digital avatars as news-gathering techniques. Three lecture hours a week for one semester. Journalism 336F and 349T (Topic: Social Media Journalism) may not both be counted.

## J 336G. Producing Social Documentaries for Television News.

Restricted to journalism majors. Instruction in the production of social documentaries for television, with emphasis on social issues often ignored by television news. Includes production of a twenty-minute long-form story. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each; Journalism 331G with a grade of at least C-; and Journalism 330F (or 353D) with a grade of at least C-.

### J 336J. Lifestyle Journalism.

Specialized reporting and writing in lifestyle coverage, including food, fashion, entertainment and travel. Three lecture hours a week for one semester. Journalism 336J and 349T (Topic: Lifestyle Journalism) may not both be counted. Offered on the letter-grade basis only. Prerequisite: Journalism 310F with a grade of at least B-.

#### J 336M. Music Journalism.

Restricted to journalism majors. Reporting, reviewing and writing about all aspects of the music industry, from start-up record labels to established companies, to independent artists and major musicians. Uses new digital tools to gather content and explore how the industry, and covering it, has changed. Three lecture hours a week for one semester. Only one of the following may be counted: Journalism 336M, 339T (Topic: Music into Words), or 339T (Topic 2). Prerequisite: Journalism 310F and 311F with a grade of at least B- in each.

## J 337F. Long-Form Feature Writing.

Advanced instruction in reporting and writing long-form narratives, including lessons in analyzing story-telling tools, strategies, and techniques. Examination of narrative strategies and techniques across different media platforms. Three lecture hours a week for one semester. Prerequisite: Journalism 310F with a grade of at least B-.

## J 337G. Opinion Writing.

Restricted to journalism majors. Examines opinion writing and commentary in traditional print and evolving online formats. Three lecture hours a week for one semester. Prerequisite: Journalism 310F (or 320D) and 311F (or 321C) with a grade of at least B- in each.

#### J 337J. Writing for Online News Audiences.

Students will learn how to write informatively and effectively for online audiences, and how to repurpose traditional print journalism for online publication. Three lectures a week for one semester. Journalism 337J and 349T (Topic 22) may not both be counted. Prerequisite: Journalism 310F with a grade of at least B-.

#### J 338F. Advanced Visual Design.

Restricted to journalism majors. Advanced exploration of principles and processes of visual design, including design principles, visual perception, typography, image making, uses of color, printing techniques, and publication design. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: Journalism 303F or 336D with a grade of at least C, and Journalism 310F and 311F with a grade of at least B- in each.

## J 338J. News for a Mobile Audience.

Restricted to journalism majors. Examines the mobile landscape, including social media and journalism practice in a mobile world, as well as the mobile news consumer and mobile and social media content. Three lecture hours a week for one semester. Journalism 338J and 349T (Topic: News for a Mobile Audience) may not both be counted. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each.

#### J 339D. News Documentaries and Public Affairs.

Study and practice of researching, writing, and producing short-form and magazine documentaries for television. Three lecture hours a week for one semester. Prerequisite: Journalism 310F with a grade of at least B-.

#### J 339F. Investigative Reporting.

Restricted to journalism majors. Emphasis on determining what an investigative story is, finding investigative stories, and basic tactics in pursuing such stories. Three lecture hours a week for a semester. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each.

#### J 339M. Mobile Media Apps Development.

Restricted to journalism majors. Planning and building a mobile app, whether for Android, iOS, or web-based, and personal communication in the news business and in various other journalism-related topics. Three lecture hours a week for one semester. Only one of the following may be counted: Journalism 339M, 339G, or Journalism 359T (Topic: Mobile News App Design). Prerequisite: Upper-division standing; Journalism 310F and 311F with a grade of at least B- in each, and Journalism 335J with a grade of at least C-.

#### J 339S. Research in Texas Sports and Media.

Same as Communication 330. Restricted to journalism majors. Supervised research with a faculty member; research may consist of an individual project or assisting a faculty research project. Hours to be arranged. May be repeated for credit. Prerequisite: Upper-division standing and a University grade point average of at least 2.25; and Journalism 310F (or 320D) and 311F (or 321C) with a grade of at least Bin each.

#### J 339T. Topics in Specialized Journalistic Skills.

Restricted to journalism majors. Contemporary social, professional, and intellectual concerns in the practice of specialized journalistic skills. Three lecture hours a week for one semester. Some topics may require additional laboratory hours. May be repeated for credit when the topics vary. Prerequisite: Journalism 310F (or 320D) and 311F (or 321C) with a grade of at least B- in each; additional prerequisites may vary with the topic.

**Topic 1: Mapping in Storytelling.** Restricted to journalism majors. Creating visual stories that combine text, charts and maps. Foundations of data analysis, spatial analysis, design, data visualization and cartography, including hands-on practice with GIS software and discussions of editorial and ethical concerns in visual storytelling. Assignments include combining new skills and reporting to produce visual stories. Journalism 339T (Topic: Mapping in Storytelling) and 339T (Topic 1) may not both be counted. Additional prerequisite: Upper-division standing, and Journalism 327D (or 333F) with a grade of at least B-.

**Topic 3: Producing Documentaries for Sports Journalism.** Restricted to journalism majors. Applied skills in teams to produce one original documentary sports story. Emphasis placed on stories that transcend competition and explore larger social issues, such as race, sex, gender, class, opportunity, community, and identity. Journalism 339T (Topic: Documentaries for Sports) and 339T (Topic 3) may not both be counted.

**Topic 4: Tracking Online Audience Engagement.** Introduction to current practices in tracking and engaging online audiences such as web metrics, Google Analytics, search engine optimization, and keyword advertising.

#### J 340C. Topics in Journalism, Communication, and Culture.

Issues concerning minority or nondominant groups within the United States. Three lecture hours a week for one semester. Some topics may

require additional laboratory hours. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

#### Topic 4: Leadership, Management, and the Media.

#### J 340D. Reporting on Technology.

How to report on technology and its meaning for business and society using the Austin technology scene. Hands-on reporting, from robotics and mobile media to gaming and music production. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Journalism 310F with a grade of at least B-.

#### J 340F. Covering the Global Economy.

Restricted to journalism majors. Examines the enduring financial, economic, and business issues journalists confront in covering the global economy. Three lecture hours a week for one semester. Prerequisite: Journalism 310F (or 320D) and 311F (or 321C) with a grade of at least B- in each.

## J 340G. Reporting Asia: A Foreign Correspondent's Framework.

Restricted to journalism majors. Explores dynamic ways of looking at, thinking about, and reporting the world, and establishes a framework for analyzing how the news media cover key events, issues, and processes that shape our lives in a global society. Three lecture hours a week for one semester. Journalism 340G and 395 (Topic 17: Reporting Asia) may not both be counted. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each.

#### J 340J. Documentary Tradition of Latin America.

Contemporary social, professional, and intellectual concerns with the practice of journalism. Study of still photographic and video documentary work by Latin Americans about Latin America. Production of photographic essays on Latin American culture. Three lecture hours a week for one semester. Journalism 340J and 349T (Topic: Documentary Tradition in Latin America) may not both be counted. Prerequisite: Journalism 310F or Communication 316 with a grade of at least B-

#### J 341F. Understanding African Americans and the Media.

Documentaries, readings, discussions, projects, and theories facilitate the examination of the relationship between African American history and contemporary American society. Media representations of African Americans are evaluated and news coverage of African Americans is explored in depth. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

## J 341G. Reporting China: A Foreign Correspondent's Workshop.

Restricted to journalism majors. Contemporary social, professional, and intellectual concerns with the practice of journalism. Three lecture hours a week for one semester. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each.

#### J 341J. Minorities and the Media.

Issues concerning minority or nondominant groups in the United States. Survey of minority communication problems, including alienation, fragmentation, and media and Internet access. Criticism and feedback for minority groups based on racial/ethnic background, age, sex, disability, social or economic class, and sexual orientation. Three lecture hours a week for one semester. Only one of the following may be counted: Journalism 341H, 341J, Latin American Studies 322 (Topic 10: Minorities and the Media), Mexican American Studies 374 (Topic 22: Minorities and the Media), Urban Studies 354 (Topic: Minorities and the Media), Women's and Gender Studies 340 (Topic 21).

## J 342F. Women and the News.

Restricted to journalism majors. Historical and contemporary exploration of women and the news. Examination of the role of women in producing news and the construction of women within news texts. Three lecture hours a week for one semester. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each.

## J 342G. Reporting the World: A Critical Examination of the United States News Media.

Dynamic ways of looking at, thinking about, and reporting the world, both abroad and at home. Establishes a framework for analyzing how the news media cover key events, issues, and processes that shape our lives in a global society. Three lecture hours a week for one semester. Prerequisite: Journalism 310F with a grade of at least B-.

#### J 342J. Visual Media and the News.

Restricted to journalism majors. Explores the power of mediated images in culture and society. Examines the way images, language, and human activity shape visual messages and the historical relationship between technology and image-creation. Three lecture hours a week for one semester. Journalism 342J and 349T (Topic: Visual Media and the News) may not both be counted. Offered on the letter-grade basis only. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each.

#### J 343F. Journalism and Religion.

Restricted to journalism majors. Critical examination of how religion traditionally has been covered in the United States, and guidelines for developing individual thinking and reporting on religious issues. Three lecture hours a week for one semester. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each.

## J 343G. Exploring Digital Media and Society.

Examines the connection between new media and society through a variety of theoretical and practical perspectives to explore the implications of the use of technology and new media in influencing community, social relationships, and public and private spaces, as well as the profession of journalism. Three lecture hours a week for one semester.

#### J 344F. Reporting on Gender and Sexuality.

Restricted to journalism majors. Instruction on how to cover controversial issues around gender and sexuality. Review of the sociology of gender and sexuality, with a focus on political, economic, and cultural implications. Three lecture hours a week for one semester. Prerequisite: Journalism 310F (or 320D) and 311F (or 321C) with a grade of at least B- in each.

## J 344G. Urban Journalism.

Restricted to journalism majors. Studies of basic city functions and how to detect urban dysfunctions before crises become news. Topics include infrastructure decay, traffic congestion, poverty and homelessness, digital divides, school dropouts, conflict and crime, riots and protests, obesity and disease, recreation, and pollution. Three lecture hours a week for one semester. Prerequisite: Journalism 310F (or 320D) and 311F (or 321C) with a grade of at least B- in each.

#### J 344J. Media Images and Society.

Restricted to journalism majors. The power of mediated images in culture and society; exploration of the way images, language, and human activity shape visual messages; and the historical relationship between technology and image creation. Three lecture hours a week for one semester. Journalism 344J and 349T (Topic: Media Images and Society) may not both be counted. Prerequisite: Journalism 310F (or 320D) and 311F (or 321C) with a grade of at least B- in each.

#### J 345F. Social Issues Reporting.

Restricted to journalism majors. Coverage of social issues such as immigration, health care, and child welfare. Examination of stereotypes, how they affect reporting, and how they change as student reporters encounter new subjects. Three lecture hours a week for one semester. Prerequisite: Journalism 310F (or 320D) and 311F (or 321C) with a grade of at least B- in each.

#### J 345G. Human Rights Journalism.

Restricted to journalism majors. Exploration of the role of journalists in exposing human rights abuses. Modules include case studies from El Salvador, South Africa, Zimbabwe, Rwanda, Bosnia, Sudan, Israel, and Russia, as well as the legal and moral obligations of journalists as witnesses to atrocities and genocide. Examination of the Bush Administration's global War on Terror and the legacy confronting the Obama Presidency. Three lecture hours a week for one semester. Prerequisite: Journalism 310F (or 320D) and 311F (or 321C) with a grade of at least B- in each.

## J 346F. Reporting on the Environment.

Restricted to journalism majors. Instruction and supervised fieldwork in environmental coverage. Topics include interviewing, elements and structures of good environment writing, the concepts of scientific certainty and uncertainty, and communicating complex science to lay audiences. Issues covered include climate change, energy, air and water quality, and sustainability. Three lecture hours a week for one semester. Journalism 346F and 349T (Environmental Journalism) may not both be counted. Prerequisite: Journalism 310F (or 320D) and 311F (or 321C) with a grade of at least B- in each.

#### J 346G. Domestic Issues and Global Perspective.

Examining domestic issues (consumerism, food/heath, environmentalism, energy consumption) from global and intercultural

environmentalism, energy consumption) from global and intercultural perspectives. Proper positioning of the United States helps journalists and news consumers think outside the box. Three lecture hours a week for one semester.

## J 347F. Reporting Latin America.

Foreign reporting and international news production processes, with special emphasis on Latin America. Three lecture hours a week for one semester. Prerequisite: Journalism 310F with a grade of at least B-.

## J 347G. Cultural Survey of Photography.

Development of photojournalism and commercial, documentary, amateur, and art photography, including historical processes, the evolution of stylistic trends, and the careers of major photographers. Three lecture hours a week for one semester. Prerequisite: Journalism 310F or Communication 316 with a grade of at least B-.

#### J 348D. Gender and the News.

Same as Women's and Gender Studies 324 (Topic 4). Historical and contemporary exploration of gender and the news. Examination of the role of marginalized gender groups in producing news and the construction of gender within news texts. Three lecture hours a week for one semester. Only one of the following may be counted: Journalism 348D, Women's and Gender Studies 324 (Topic 4), 345 (Topic: Women and the News). Prerequisite: For journalism majors, Journalism 310F with a grade of at least B-; for others, six semester hours of upperdivision coursework in women's and gender studies.

#### J 348F. Covering the Latino Community in the United States.

Challenging and developing views of the contemporary Latino community and other underrepresented people in the United States. Topics include a history of ethnic groups in the United States and their politics, education, organization, immigration, culture, power, and media. Three lecture hours a week for one semester. Prerequisite: Journalism 310F with a grade of at least B-.

#### J 348G. The Business of Sports Media.

Same as Advertising 348S and Public Relations 348S. Examination of the business of sports-related media, including over-the-air television, cable, satellite television, print, radio, social media, and internet-based media, and the impact of such media on sports presentation and development, professional franchises, colleges, and conferences. Emphasis on how the business of sports media generates revenue and content, and the business models for each type of media, the challenges to such models, and the likely future changes to them. Three lecture hours a week for one semester. Only one of the following may be counted: Advertising 348S, 378 (Topic: The Business of Sports Media), Journalism 348G, 349T (Topic: The Business of Sports Media), Public Relations 348S, 378 (Topic: The Business of Sports Media).

#### J 348L. Making Sense of the News.

Restricted to non-journalism majors. Gaining the critical thinking skills necessary to analyze what is news in our digital age. Examines accuracy, sources and verification, and bias behind information in the public sphere. Three lecture hours a week for one semester.

#### J 348S. Media Management.

Print and broadcast management and planning in operations, personnel, content, marketing, finance, technology, and regulation. Three lecture hours a week for one semester.

#### J 349E. Elections, Voters, and News.

Explores U.S. election history, dimensions of and influencers in U.S. elections, news coverage of candidates and issues, and voters and their attitudes toward candidates and issues as well as their engagement with election news. Three lecture hours a week for one semester. Journalism 349E and 349T (Topic: Elections/Voters/News) may not both be counted. Prerequisite: Upper-division standing.

#### J 349F. Reporting Public Health and Science.

Restricted to journalism majors. Specialty reporting to help news consumers understand complex health and medicine issues. Considers the lack of critical perspective, balanced reporting, and grasp of fundamental issues that afflict much health reporting. Focuses on the latest reporting techniques and narrative skills to illuminate an intellectually demanding field that also includes public health policy. Three lecture hours a week for one semester. Journalism 349F and 349T (Topic: Reporting Public Health and Science) may not both be counted. Prerequisite: Journalism 310F (or 320D) and 311F (or 321C) with a grade of at least B- in each.

#### J 349L. News Literacy for a Digital Age.

Explores news, journalists, the practice and ethics of journalism, news platforms, history, and threats to the future of news, and the attitudes, demographics, and behavior of the news audience. Three lecture hours a week for one semester. Journalism 349L and 349T (Topic: News Literacy for a Digital Age) may not both be counted.

#### J 349N. News Media and Politics.

Examines central controversies and theories about the role the media in politics and the political systems. Three lecture hours a week for one

semester Journalism 349N and 349T (Topic: News Media and Politics) may not both be counted.

## J 349T. Topics in Understanding and Reporting Social Issues.

Restricted to journalism majors. Contemporary social, professional, and intellectual concerns in the practice of journalism. Three lecture hours a week for one semester. Some topics may require additional laboratory hours. May be repeated for credit when the topics vary. Prerequisite: Journalism 310F (or 320D) and 311F (or 321C) with a grade of at least B-in each.

**Topic 1: Senior Seminar.** Capstone experience in analysis of current journalism issues. Students complete a major research project. Additional prerequisite: Consent of instructor.

Topic 5: Broadcast News Practices and Analysis.

**Topic 8: Alternative Media.** Journalism 349T (Topic 8) and 395 (Topic 22: Alternative Media) may not both be counted.

Topic 9: Covering Technology and Innovation.

Topic 11: Editorial Column Writing.

Topic 14: Latino Policy Issues.

Topic 20: Video Journalism for the Web.

Topic 21: Writing for Magazines and Specialty Publications.

Topic 22: Writing for Online Publications.

#### J 350F. Media Law.

Examination of legal rights and restrictions for online and print journalism, including Constitutional guarantees, libel, invasion of privacy, and contempt of court. Three lecture hours a week for one semester. Required for all journalism majors.

#### J 351F. Journalism, Society, and the Citizen Journalist.

Journalism's principles, process, and role in society are examined. Distinctions between journalists and citizen journalists are discussed and the news audience is explored in depth. Three lecture hours a week for one semester.

## J 352. Topics in Journalism.

Contemporary social, professional, and intellectual concerns in the practice of journalism. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites vary with the topic.

**Topic 6: Presidents and the Press.** Three lecture hours a week for one semester. Additional prerequisite: Consent of instructor.

#### J 352F. Ethics in Journalism.

In-depth examination of the ethical choices individual journalists face and the ethical implications of how news media operate in a larger social and political framework. Three lecture hours a week for one semester. Prerequisite: Journalism 310F or Communication 316 with a grade of at least B-.

## J 353F. Historical Perspectives in Journalism.

Evolution of journalism and mass media, including the social, economic, and political factors that have contributed to changes in news gathering and distribution. Three lecture hours a week for one semester.

## J 354F. Journalism and Press Freedom in Latin America.

Same as Latin American Studies 322 (Topic 20). Focus on journalism in Latin America with an emphasis on the struggle for democracy and press freedom in the region through country-by-country survey of historical, political, economic, cultural, ethnic and geographical aspects. Examination of the evolution of professional journalism in Latin America, including topics such as the legal framework for freedom of expression, ethical principles, concentration of media ownership and the emergence of digital media. Knowledge of Spanish language is recommended, but it is not a requirement. Three lecture hours a week for one semester. Only one of the following may be counted: Journalism 354F, 367E, Latin American Studies 322 (Topic 14), 322 (Topic 20).

## J 355F. Living in the Information Age.

Examines communication and information technologies with particular emphasis on the Internet and its components. Explores how digital and mobile technologies are used by the Millennial Generation and with what effects. Three lecture hours a week for one semester. Only one of the following may be counted: Journalism 355F, 359T (Topic: Living in the Information Age), 359T (Topic 8).

### J 355P. The Business of News.

Discusses journalism as a business, including audience engagement and the latest business models in the news industry. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### J 358C. Becoming Citizen Journalists.

Restricted to non-journalism majors. Covers the basics of journalism for students who are interested in sharing truthful stories to a public audience, but do not intend to pursue a career in the profession. Uses digital and social media tools. Explores three topics: how to find and gather the best factual information, how to present it in clear and engaging ways, and how to make ethical decisions that serve the needs of the audience and democracy. Three lecture hours a week for one semester. Journalism 308J and 358C may not both be counted.

#### J 358N. Online Incivility.

Explores online incivility - defined as nasty remarks intended to hurt that often contain profanity, capital letters to indicate yelling, and put-downs or name-calling - in news story comments and social media. Critically assess the impact of incivility on public discussions online and how that influences journalists and other media practitioners. Thee lecture hours a week for one semester.

## J 358P. Popular Culture and the Press.

Explores the relationship between American popular culture and the press, its role in our everyday lives, and how it helps shape our attitudes and identities. Explores popular culture in television, film, magazines, the Internet, social media, and advertising. Subjects include movies, music, film, fashion, food, travel, celebrity and society news, among others. Three lecture hours a week for one semester.

## J 358S. Communicating Social Change.

Utilizing communication skills to tell truthful stories of underrepresentation and marginalization. Three lecture hours a week for one semester. Prerequisite: Journalism 310F or Journalism 313P with a grade of at least B-

## J 358T. Topics in Journalistic Practices.

Restricted to non-journalism majors. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

#### J 359S. Topics in Current Journalistic Issues.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

## J 359T. Topics in Journalism, Skills, and Techniques.

Restricted to journalism majors. Contemporary professional skills and techniques in the practices of journalism. Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

Prerequisite: Journalism 310F (or 320D) and 311F (or 321C) with a grade of at least B- in each.

**Topic 1: Living in the Information Age.** Restricted to journalism majors. An examination of communication and information technologies with particular emphasis on the Internet and how it is used by the Millennial Generation; how communication and information technologies evolve, and the cultural, economic, political, and social implications of such technologies for society; and how individuals, media organizations, and corporations employ the Internet for their benefit. Journalism 359T (Topic: Living in the Information Age) and Journalism 359T (Topic 1) may not both be counted. **Topic 4: Advanced News Editing.** 

#### J 360F. Internship.

Restricted to journalism majors. Internships to be arranged by student and approved by instructor. Internship hours to be arranged. Offered on the pass/fail basis only. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each.

#### J 160G. Journalism Practicum.

Restricted to journalism majors. Internship hours to be arranged. May be repeated for credit, but only one hour may be counted toward the Bachelor of Journalism degree. Offered on the pass/fail basis only. Prerequisite: Communication 350 or Journalism 360F.

#### J 360S. Sports Media Internship.

Restricted to journalism majors. Sports media internships to be arranged by student and approved by instructor. Internship hours to be arranged. Offered on the pass/fail basis only. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each.

#### J 361F. Reporting Texas.

Restricted to journalism majors. Students work as online reporters, photographers, and editors for the School of Journalism's Reporting Texas website. Three lecture hours and three laboratory hours a week for one semester. Journalism 359T (Topic: Reporting Texas) and 361F may not both be counted. Prerequisite: Journalism 310F (or 320D) and 311F (or 321C) with a grade of at least B- in each; six additional semester hours of upper-division coursework in journalism with a grade of at least B; and consent of instructor.

#### J 362F. Journalism Portfolio.

Restricted to journalism majors. A synthesis experience to polish journalism skills, showcase reporting and production abilities across multiple journalistic platforms, and complete a professional online portfolio. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Senior standing; Journalism 310F and 311F with a grade of at least B- in each; and six semester hours of upper-division coursework in journalism with a grade of at least B-.

#### J 363. Theories of Mass Communication.

Comparative survey of perspectives, research, and theories on communication through the mass media; theories on media effects and the construction of social reality, especially regarding the news media. Three lecture hours a week for one semester.

#### J 363C. Broadcast Capstone.

Restricted to journalism majors. Stresses proficiency in broadcast reporting and production by emphasizing professional skills and habits. One-and-one-half lecture hours and three laboratory hours a week for one semester. Journalism 363C and 335G may not both be counted. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each, and credit or registration for Journalism 330C (or 330F) with a grade of at least C-.

#### J 363D. Digital Innovations Capstone.

Development of cutting-edge media products. Working in groups or individually; conceive, pitch, plan, design, and create projects under the guidance of a professor, graduate students, and professional mentors. Three lecture hours a week for one semester. Prerequisite: Upper-division standing; and Journalism 310F and 311F with a grade of at least B- in each.

#### J 363F. Capstone Projects in Journalism.

Restricted to journalism majors. The design and execution of special projects showcasing the individual student's interests in one or more journalistic platforms. Three lecture hours a week for one semester. May be repeated for credit. Prerequisite: Upper-division standing; completion of six hours of upper-division coursework in journalism with a grade of at least a B.

#### J 363L. Journalism Research Capstone.

Restricted to journalism majors. Emphasizes proficiency in researching and writing. Three lecture hours a week for one semester. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each; and 6 hours of upper-division coursework in journalism.

#### J 363S. Sports Media Capstone.

Restricted to journalism majors. Stresses proficiency in sports writing, reporting, and editing by emphasizing professional skills and habits. Three lecture hours a week for one semester. Prerequisite: Journalism 326F with a grade of at least C-.

#### J 363V. Visual Capstone.

Restricted to journalism majors. Stresses proficiency in visual reporting by emphasizing professional skills and habits. Three lecture hours a week for one semester. Only one of the following may be counted: Journalism 333J, 359T (Topic: Photography for Reporting Texas), or 363V. Prerequisite: Journalism 310F and 311F with a grade of at least Bin each; and Journalism 331D or 333G with a grade of at least C-.

#### J 363W. Reporting Capstone.

Restricted to journalism majors. Stresses proficiency in writing, reporting, and editing by emphasizing professional skills and habits. Three lecture hours a week for one semester. Prerequisite: Journalism 310F and 311F with a grade of at least B- in each; and six hours of upperdivision courses in journalism.

#### J 365M. Experiential Learning.

Restricted to students pursuing a minor offered by the Moody College of Communication. Hours to be arranged. Prerequisite: Consent of Instructor.

#### J 165P, 265P, 365P. Specialized Practice in Journalism.

Restricted to journalism majors. Specialized journalistic instruction by a professional from the field. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May be repeated for credit. Prerequisite: Upper-division standing; Journalism 310F and 311F with a grade of at least B- in each; and consent of instructor.

#### J 367E. Journalism in Latin America.

Study of the practice of journalism in Latin America. Survey of the region, including historical, political, economic, cultural, ethnic, and geographical aspects. Three lecture hours a week for one semester. Only one of the following may be counted: Journalism 354F, 367E, Latin American Studies 322 (Topic 14), 322 (Topic 20). Prerequisite: Upper-division standing and a major in journalism, or consent of instructor.

#### J 370K. Advanced Photojournalism.

Explores intensive photographic reportage and documentation using the camera as a tool of investigation and interaction. Emphasis on creation of photo stories, photo essays, and feature stories, with editing and page layout. Three lecture hours and four laboratory hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Acceptance into the photojournalism area of concentration or consent of instructor.

Topic 2: Documentary Video. Topic 3: Picture Editing.

#### J 371K. Photographic Illustration.

Principles of studio lighting, theory and practice of contemporary color, location lighting, and the production of portfolio-quality work, as applied to advertising, photographic illustration, and photojournalism. Three lecture hours and four laboratory hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Acceptance into the photojournalism area of concentration or consent of instructor.

Topic 1: Location Lighting. Topic 2: Studio Photography.

#### J 178P, 278P, 378P. Special Projects in Journalism.

Restricted to journalism majors. Supervised projects in the field of journalism. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May be repeated for credit. Prerequisite: Upper-division standing, and consent of instructor.

#### J 379. Journalism Independent Study.

Restricted to journalism majors. Designed to give students the opportunity to pursue special studies for which separate courses have not been organized. The equivalent of nine laboratory hours a week for one semester. May be repeated for credit. Prerequisite: Journalism 310F (or 320D) and 311F (or 321C) with a grade of at least B- in each, and consent of the director of the school.

#### J 379H. Honors Tutorial Course.

Restricted to journalism majors. Conference course of intensive study, planned by Journalism Honors Committee; research and the writing of a substantial paper on a special journalism topic. Individual instruction. May be repeated for credit. Prerequisite: Admission to the Journalism Honors Program and consent of the director of the school.

#### J 379P. Photojournalism Research Projects.

Restricted to journalism majors. Designed to give photojournalism students the opportunity to pursue special studies for which separate courses have not been organized. The equivalent of nine laboratory hours a week for one semester. May be repeated for credit. Prerequisite: Journalism 310F (or 320D) and 311F (or 321C) with a grade of at least Bin each.

## Department of Radio-Television-Film

Because prerequisites are subject to change, students should consult the Course Schedule (http://registrar.utexas.edu/schedules) before registering.

For <u>Radio-Television-Film 307</u>, 308, 317, and 318 during Fall and Spring semesters, the department restricts enrollment during the first registration period to radio-television-film majors. During later registration periods, courses in which space is available may be opened to non-majors. Most upper-division radio-television-film courses in production are restricted to radio-television-film majors.

Students wishing to add a course not accessible online due to major restrictions, prerequisites, etc. may try to pursue a radio-television-film late add by contacting the instructor of the course. Late adds begin on the fifth class day of the semester and require a late add form.

The Department of Radio-Television-Film reserves the right to retain and to use for noncommercial purposes copies of all work completed by students as part of departmental course assignments.

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

#### Radio-Television-Film: RTF

#### **Lower-Division Courses**

#### RTF 301N. Introductory Topics in Radio-Television-Film.

Restricted to non-radio-television-film majors only. Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### RTF 301S. Social Activism in Film.

Restricted to non-radio-television-film majors. Explores ways filmmakers express ideas about important movements and social issues. Three lecture hours and one two-and-one-half-hour screening each week for one semester. Radio-Television-Film 301N (Topic: Social Activism in Film) and 301S may not both be counted.

#### RTF 302C. Media Literacy in the Digital World.

Restricted to non-radio-television-film majors. Addresses media and information literacy skills that can be used to support personal, academic, civic, and career interests through thoughtful access, critical analysis, evaluation and production of media in a digital world. In the process, the uses of literacy throughout history are contextualized within broader cultural, political, economic and aesthetic traditions. Three lecture hours a week for one semester. Only one of the following may be counted: Radio-Television-Film 301N (Topic: Media Literacy), 302C, 365D (Topic: Media Literacy and Civic Engagement), or 365D (Topic 3).

# **RTF 303C.** Introduction to Media and Entertainment Industries.

Introduction to Media and Entertainment Industries provides a foundational social science understanding of media and entertainment industries. Drawing on insights from media studies, management, and sociology, uses social science theories, methods, and practices to examine social, political, and economic forces that shape and are shaped by media production, distribution, and monetization. Three lecture hours per week for one semester. Additional hours may be arranged.

#### RTF 304. Storytelling in Film and Television.

Restricted to non-radio-television-film majors. Study of the way meaning is structured and perceived in film, television, and digital/interactive media; introduction to basic storytelling techniques in multiple media formats. Includes viewing and analysis of movies, television series, video games, and various other media narratives. Three lecture hours and two and one-half hours of film screenings a week for one semester. Radio-Television-Film 304 and 317 may not both be counted.

#### RTF 305 (TCCN: COMM 1307). Introduction to Media Studies.

Introduction to historical, cultural, political, economic, and international characteristics of film, television, and other media in society. Two lecture

hours, one discussion hour, and one two-and-one-half-hour film screening a week for one semester.

#### **RTF 306. Introduction to World Cinema History.**

Survey of the aesthetic, cultural, economic, political, and technological trends impacting motion pictures around the world from their origins in the late nineteenth century through the present. Three lecture hours and one two-and-one-half-hour of film screenings a week for one semester. Only one of the following may be counted: Radio-Television-Film 306, 314, or 322C.

#### RTF 307. Media and Society.

Concentrates on media's role in society, including our contributions as participants and audiences, as well as consequences to our social norms, political engagement, and identities. Considers how media work within local, national, and global contexts, addressing social continuities and disruptions, organizational processes, policies and politics, and economic conditions. Three lecture hours a week for one semester. An additional discussion section may also be required.

#### RTF 308. Development of Film and Media.

Study of historical development of the film, radio, television, and digital media industries. Overview of the cultural, social, economic, and technological contexts in which media have been produced and circulated. Three lecture hours and two and one-half hours of film screening a week for one semester. A one-hour discussion section may also be required.

#### RTF 317. Narrative Strategies and Media Design.

Study of the way meaning is structured and perceived in film, television, and digital/interactive media; introduction to basic storytelling techniques in multiple media formats. Includes viewing and analysis of movies, television series, video games, and various other media narratives. Three lecture hours, one hour discussion, and one two-andone-half hour film screening a week for one semester. Students may not enroll in this course more than twice. Radio-television-film 304 and 317 may not both be counted. Prerequisite: Three semester hours of lowerdivision coursework in radio-television-film.

#### RTF 318. Introduction to Image and Sound.

Exploration of fundamental film and digital production concepts and techniques through lectures, projects, and laboratory work. Three lecture hours and three laboratory hours a week for one semester. Students may not enroll in this course more than twice. Prerequisite: Six semester hours of lower-division coursework in radio-television-film.

#### RTF 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Radio-Television-Film.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Radio-Television-Film. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### **Upper-Division Courses**

#### RTF 321C. History of American Television.

Survey of the evolution of United States television programming, aesthetics, production, and policy. Three lecture hours and two and onehalf hours of film screenings a week for one semester. Radio-Television-Film 316 and 321C may not both be counted. Prerequisite: Upper-division standing.

#### RTF 321D. Film History to 1960.

Introductory survey of the history of world cinema to 1960. Explores the development of film as a narrative medium, key filmmakers, films, and of the origins of the main elements of film grammar. Three lecture hours and two and one-half hours of film screenings a week for one semester. Radio-Television-Film 321D and 322C may not both be counted. Prerequisite: Upper-division standing.

#### RTF 322D. Film History 1960 to Present.

Three lecture hours and two and one-half hours of film screenings a week for one semester. Radio-Television-Film 322C and 322D may not both be counted. Prerequisite: Upper-division standing.

#### RTF 323C. Screening Race.

Introduction to the study of race and ethnicity in U.S. film, television, and new media. Includes focus on media histories, media criticism, production strategies, and U.S. audiences. Three lecture hours and two and one-half hours of film screenings a week for one semester. Only one of the following may be counted: Communication 316M, Radio-Television-Film 316M, 323C. Prerequisite: Upper-division standing.

#### RTF 324C. Introduction to Global Media.

Introduces the role of global media as a set of texts, technologies, and industries that shape our identities, our social worlds, and our political practices. Three lecture hours a week for one semester. Radio-Television-Film 312C and 324C may not both be counted. Prerequisite: Upperdivision standing.

#### RTF 324L. Topics in the Entertainment Professions.

Restricted to radio-television-film majors. Contemporary issues, practices, and skills related to communication and the entertainment industries, including studies in the business of entertainment, the entertainment professions, the creative process, and contemporary Hollywood cinema. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites vary with the topic.

**Topic 5: Careers in Entertainment-Los Angeles.** Explores specific career interests with a focus on skills, experience, training, and contacts that are required in Los Angeles. Taught in Los Angeles, California. Only one of the following may be counted: Communication 324 (Topic: Careers in Entertainment), 324 (Topic 5), Radio-Television-Film 324L (Topic: Careers in Entertainment), 324L (Topic 5).

#### RTF 326C. Tech Culture.

Examines ideas about the relationship between technology and culture, how US culture views technology, and the historically contingent design, development and use of different media and communication technologies. Three lecture hours a week for one semester. Only one of the following may be counted: Communication 309, Radio-Television-Film 309, 326C. Prerequisite: Upper-division standing.

#### **RTF 327C. Digital Remix Cultures.**

Restricted to radio-television-film majors. Introduction to the study of digital remix cultures. Subjects will include medium specific mash-up cultures and platforms (image, audio, video), authorship and ownership, political remix and culture jamming, and memes. Assignments will merge theory and practice. Three lecture hours and two laboratory hours a week for one semester. Radio-Television-Film 319 and 327C may not both be counted. Offered on the letter-grade basis only. Prerequisite: Upper-division standing.

#### RTF 328C. Gender and Media Culture.

Critical analysis of media and its interrelation with issues of gender. Three lecture hours and one two-and-one-half hour film screening a week for one semester. Only one of the following may be counted: Radio-Television-Film 359 (Topic: Women and Media Culture), 359S (Topic 2), 325C, 328C. Prerequisite: Upper-division standing.

#### **RTF 329C. Digital Media Production.**

Interactive course designed to teach foundational Digital Media Production tools. Apply digital media tools and techniques to a variety of tasks in the pipeline of production from concept, storyboard, layout to compositor, VFX, CG and interactive design. Three lecture hours and three laboratory hours each week for one semester. Radio-Television-Film 329C and 344M (Topic: Digital Media Production may not both be counted. Prerequisite: Forty-five hours of coursework.

#### RTF 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Radio-Television-Film.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Radio-Television-Film. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### **RTF 330K. Introduction to Research Methods.**

Introduction to applied media research and research criticism; fundamentals of audience analysis, survey design, experimental and field research, content analysis. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### RTF 330L. Internship in Film and Electronic Media.

Restricted to radio-television-film majors. Practical work experience related to the study of film, television, radio, or other media. Students must make their own arrangements to secure relevant internships. The equivalent of ten lecture hours a week for one semester. Radio-Television-Film 330L and 330M may not both be counted. Offered on the pass/fail basis only. Prerequisite: Upper-division standing and consent of the internship coordinator.

#### RTF 330M. Internship in Digital Media.

Restricted to non-radio-television-film majors. Practical work experience in digital media and postproduction media. Students must make their own arrangements to secure relevant internships. The equivalent of ten lecture hours a week for one semester. Radio-Television-Film 330L and 330M may not both be counted. Offered on the pass/fail basis only. Prerequisite: Upper-division standing and consent of instructor.

#### **RTF 330N.** Internship in Media Industries.

Restricted to non-radio-television-film majors. Practical work experience related to media industries. Students must make their own arrangements to secure relevant internships. The equivalent of ten lecture hours a week for one semester. Offered on the pass/fail basis only. Prerequisite: Upper division standing and consent of the internship coordinator.

#### RTF 331K. Film, Video, and Television Theory.

Survey of basic theories that seek to explain the relationships between film, video, television, and their respective audiences. Three lecture hours and one two-and-a-half hour film screening a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

Topic 1: Cult Movies and Gender Issues.

Topic 2: Television and Theories of Gender.

**Topic 4: Feminist Media Theory.** Survey of basic feminist media theory.

Topic 5: Screen Theory. Survey of basic screen theory.

**Topic 7: Stardom and Celebrity Culture.** Survey of the construction and meanings of stardom in film, television, and new media. Subjects include links with the media industries; stardom and race, class, gender, and sexuality; and new permutations of celebrity culture. Only one of the following may be counted: Radio-Television-Film 331K (Topic: Critical Studies of Film and Television Stardom), 331K (Topic 6), 331K (Topic 7).

**Topic 8: Transmedia Storytelling.** Radio-Television-Film 331K (Topic: Transmedia Storytelling) and 331K (Topic 8) may not both be counted.

#### RTF 331L. Corporate and Instructional Video.

Restricted to radio-television-film majors. Study, design, production, use, and evaluation of corporate and instructional video materials. Three lecture hours a week for one semester, with studio hours to be arranged. Prerequisite: Upper-division standing.

#### **RTF 331M. New Communication Technologies.**

Survey of history of new communication technologies. Analysis of regulation, policy, economics, and programming of new communication technologies. Three lecture hours and one-and-one-half hours laboratory hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 1: Digital Media and Design.** Radio-Television-Film 331M (Topic 1) and 331P (Topic: Digital Media & Design) may not both be counted.

#### **RTF 331N. The Information Society.**

Introduction to information technologies such as the Internet, telephones, and computers and their relation to existing media; includes history, policy, economics, and social impact. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 1: Information Society and Beyond.** Radio-Television-Film 331N (Topic: Information Society) and 331N (Topic 1) may not both be counted.

#### RTF 331P. Topics in New Communication Technologies.

Applications and potential effects of new telecommunications and information technologies in the home, workplace, and in education, social services, and politics. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

Topic 3: Internet Cultures. Radio-Television-Film 331P (Topic: Internet Cultures) and 331P (Topic 3) may not both be counted. Topic 4: Video Game Culture and Criticism. Radio-Television-Film 331P (Topic: Video Game Culture & Criticism) and 331P (Topic 4) may not both be counted.

#### RTF 331Q. Topics in Digital Media.

Laboratory explorations of the spatial and narrative dimensions of the digital environment. Three lecture hours and three laboratory hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: For radio-television-film majors, the following coursework with a grade of at least C in each course: Radio-Television-Film 318 or 319, and nine additional semester hours of coursework chosen from Radio-Television-Film 309, 314, 316, 317, 318, and 319; for others, upper-division standing.

#### RTF 331R. Topics in New Media.

Students produce projects in either film, video, computer animation, collage, sculpture, assemblage, soundscape, or performance. Prior experience in one or more media is helpful but not necessary. Three lecture hours and one and one-half studio hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite:

For radio-television-film majors, twelve semester hours of lower-division coursework in radio-television-film; for others, upper-division standing and consent of instructor.

#### **RTF 333. Introduction to Screenwriting.**

An introduction to screenwriting for features, short films, documentaries, and television. Lectures explore the basic theory of story, character, and structure. Students write original screenplays during workshop hours. One and one-half lecture hours and two workshop hours a week for one semester. Prerequisite: For radio-television-film majors, upper-division standing and twelve semester hours of lower-division coursework in radio-television-film; for non-majors, upper-division standing.

#### RTF 335. Television Analysis and Criticism.

Analysis of critical methods, selected television programs, and selected critics. Practice in written criticism required of all students. Three lecture hours a week for one semester, with two-and-one-half-hours of film screening a week. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

Topic 1: Television in the Post-Network Era. Examination of contemporary television's formal-aesthetic traits as well as its shifting

position as a cultural, social, political and industrial force. Exploration of how television is being transformed as it converges with other digital technologies. Only one of the following may be counted: Radio-Television-Film 335 (Topic: Contemporary TV Criticism), 335 (Topic: TV Analysis and Criticism), 335 (Topic 1), and 335 (Topic 3).

**Topic 2: Race, Class and Gender in American Television.** Surveys history and contemporary debates regarding the construction of race, class, gender and sexual orientation in U.S. television from the late 1940s through the present day and related issues of television aesthetics, production practices, audiences, and advocacy. Radio-Television-Film 335 (Topic 2) and 335 (Topic: Race, Class and Gender in American Television) may not both be counted.

**Topic 3: Contemporary Television Criticism.** Only one of the following may be counted: Radio-Television-Film 335 (Topic: Contemporary TV Criticism), 335 (Topic: TV Analysis and Criticism), 335 (Topic 1), and 335 (Topic 3).

#### RTF 336. Special Projects in Radio-Television-Film.

Restricted to radio-television-film majors. Comprehensive research or creative projects in areas of special interest developed and executed by the student under faculty supervision. Individual instruction. May be taken twice for credit. May be repeated for credit. Prerequisite: Upperdivision standing and consent of the department.

#### RTF 337. Radio Fundamentals.

Fundamentals of audio program production. Students create either brief or long audio programs. Three lecture and three laboratory hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; Radio-Television-Film 317 and 318 with a grade of at least B-, and six additional hours of lower division coursework in Radio-Television-Film.

**Topic 1: Audio Visions.** Radio-Television-Film 337 (Topic: Audio Visions) and 337 (Topic 1) may not both be counted.

#### **RTF 337P. Multitrack Audio Production.**

Restricted to radio-television-film majors. Principles and practice of multitrack audio production. Three lecture hours a week for one semester, with studio hours to be arranged. Prerequisite: Upper-division standing; Radio-Television-Film 317 and 318 with a grade of at least Bin each; and six semester hours of lower-division coursework in radiotelevision-film with a grade of at least C in each course.

#### **RTF 340. Studio Production.**

Introduction to production of television programs, including the multicamera format. Three lecture hours and three laboratory hours a week for one semester. May not be taken concurrently with Radio-Television-Film 366 or 366K. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing, Radio-Television-Film 317 and 318 with a grade of at least B- in each, and six additional semester hours of lower-division coursework in radio-television-film.

#### Topic 1: Drama/Music Production.

**Topic 2: Public Affairs Production.** 

**Topic 4: Multi-Camera Television Directing.** Radio-Television-Film 340 (Topic: Multi-Cam Television Directing) and 340 (Topic 4) may not both be counted.

#### RTF 341. Audio Production: Sound for Picture.

Theory and practice of producing quality audio for television, film, and other picture media. Includes basic editing on a digital audio workstation. Three lecture hours and three laboratory hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing, Radio-Television-Film 317 and 318 with a grade of at least B- in each, and six additional semester hours of lower-division coursework in radio-television-film.

# RTF 341C. Advanced Audio: Sound Design and Postproduction.

Sound design and editing, and fundamentals of postproduction audio mixing. Three lecture hours and three laboratory hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing, Radio-Television-Film 317 and 318 with a grade of at least B- in each, and six additional hours of lower-division coursework in Radio-Television-Film.

**Topic 1: Sound Design and Mixing.** Sound design and editing, and post-production sound process for film, television, and immersive media. Radio-Television-Film 341C (Topic: Sound Design and Mixing) and 341C (Topic 1) may not both be counted.

#### RTF 342. Topics in Global Media.

Study of political, social, cultural, and economic factors affecting the use and impact of communication systems in an international context. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

#### Topic 1: National Media Systems.

Topic 2: Comparative Media Systems.

Topic 4: Participatory Media.

**Topic 6: Development Communication.** Same as Middle Eastern Studies 341 (Topic 4). Middle Eastern Studies 341 (Topic 4) and Radio-Television-Film 342 (Topic 6) may not both be counted.

#### Topic 7: Global Media Systems.

**Topic 8: Development Communication and Social Change.** Examines the strategic use of communication technologies and processes to engage in social change in a global context. Only one of the following may be counted: Latin American Studies 322 (Topic: Dev Comm and Social Change), Middle Eastern Studies 342 (Topic: Dev Comm and Social Change), Radio-Television-Film 342 (Topic: Dev Comm and Social Change), 342 (Topic 8).

#### RTF 342S. Topics in Global Media.

Study of political, social, cultural, and economic factors affecting the use and impact of communication systems in an international context. Three lecture hours and one two-and-one half-hour screening a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing. Topic 1: Global Hollywood. Radio-Television-Film 342 (Topic: Global Hollywood) and 342S (Topic 1) may not both be counted. Topic 2: Indian Cinema. Radio-Television-Film 342 (Topic: Indian Cinema) and 342S (Topic 2) may not both be counted.

#### **RTF 343. Advanced Video Production.**

Restricted to radio-television-film majors. Advanced study in film, television, and media production. Three lecture hours and three laboratory hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; Radio-Television-Film 366K.

**Topic 1: Advanced Narrative Production.** Individual and group production of short films using high-definition video. Additional prerequisite: Radio-Television-Film 366K (Topic 2: Narrative Production).

**Topic 2: Advanced Documentary Production.** Individual and group production of a documentary, from research and preproduction to completion. Additional prerequisite: Radio-Television-Film 366K (Topic 3: Documentary Production)

**Topic 3: Advanced Soundstage Production.** Group production of short films using the Hollywood soundstage as the primary model.

**Topic 4: Creating Cross-Platform Fundraising Media.** Small group production of client-commissioned fundraising media and an exploration of the realm of independent production contracting. Radio-Television-Film 343 (Topic 4) and 344M (Topic: Cross-Platform Content Creation) may not both be counted. Additional prerequisite: Upper-division standing, and Radio-Television-Film 346, 366D, 366K, or 368 with a grade of at least B.

**Topic 5: Developing Independent Feature Films.** Restricted to radiotelevision-film majors. Group research and lectures about producing an independent feature film. Three lecture hours and three laboratory hours a week for one semester. Radio-Television-Film 343 (Topic: Developing Indie Feature Films) and 343 (Topic 5) may not both be counted. Prerequisite: Upper-division standing and Radio-Television-Film 340 or 366K.

**Topic 8: Cinema Laboratory.** Explores the cinematic form on an elemental level through the making of several short films. Utilizes cinema-making skills through attention to process and experimentation in order to move to a higher level of precision. Radio-Television-Film 343 (Topic: Cinema Laboratory) and 343 (Topic 8) may not both be counted.

#### RTF 343C. Acting for Filmmakers.

Restricted to radio-television-film majors. Explores core elements of acting technique through scene study, improvisation, and other exercises. Three lecture hours a week for one semester. Radio-Television-Film 343 (Topic: Acting for Filmmakers) and 343C may not both be counted. Prerequisite: Upper-divison standing; and Radio-Television-Film 366D or 366K.

#### RTF 343D. Cinematography.

Restricted to radio-television-film majors. Visual storytelling and the art of cinematography through practice in a workshop environment. Three lecture and three laboratory hours a week for one semester. Radio-Television-Film 343D and 368 (Topic 2) may not both be counted. Prerequisite: Upper division standing; Radio-Television-Film 366K.

#### RTF 343M. Master Class.

Restricted to radio-television-film majors. Incorporates a guest speaker series, focused on a particular topic for the semester. Students conduct research, coordinate and attend the speaker series, and pursue creative projects related to the semester's topic. Three lecture hours and three laboratory hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing, RadioTelevision-Film 317 and 318 with a grade of at least B- in each, and six additional semester hours of lower-division coursework in radio-television-film.

#### RTF 343N. Advanced Three-Dimensional Production.

Carries the principles developed in Radio-Television-Film 366M into a variety of hands-on production settings and projects, including largecrew productions at Austin City Limits Live at the Moody Theater, as well as smaller shoots in a variety of other studios and locations. Three lecture hours and three laboratory hours a week for one semester, with additional hours to be arranged. Offered on the letter-grade basis only. Prerequisite: Upper-division standing; Radio-Television-Film 366M.

#### RTF 344M. Special Applications of Digital Media Production.

Special topics in digital media theory, design, or development. May include visual effects and motion graphics or digital media and digital art. Three lecture hours a week for one semester, with studio hours to be arranged. May be repeated for credit when the topics vary. Prerequisite: For Radio-Television-Film majors, upper-division standing, Radio-Television-Film 317 and 318 with a grade of at least B-, and six additional hours of coursework in Radio-Television-Film; for non-majors, upperdivision standing.

Topic 1: Interactive Digital Storytelling. Use of digital tools to create original web-based audiovisual productions and the study of impact of digital media and technology on traditional film and video production. Topic 3: Introduction to Visual Effects and Motion Graphics. Designed to introduce students to the core concepts and techniques used in visual effects and motion graphics. Subjects include, but are not limited to, compositing, animation, particles, and greenscreen. Radio-Television-Film 344M (Topic: Visual Effects) and 344M (Topic 3) may not both be counted.

**Topic 4: Interactive Media and Game Development.** Radio-Television-Film 344M (Topic: Interactive Media and Game Development) and 344M (Topic 4) may not both be counted.

**Topic 5: Writing for Interactive Games and Media**. Designed to give aspiring game writers the skills, knowledge and techniques needed to write successfully for the games industry. Through the creation of original interactive games, focuses on such fundamentals as premise, character development, story structure, and the creation of multi-level worlds. Only one of the following may be counted: Radio-Television-Film 344M (Topic: Wri for Interact Games & Media), 344M (Topic 5), Theatre and Dance 355T (Topic: Writing for Interactive Games). **Topic 6: Introduction to 3D Animation**. Only one of the following may be counted: Radio-Television-Film 344M (Topic: Computer Animation and 3-D Modeling), 344M (Topic 2), 344M (Topic 6).

#### RTF 344N. Advanced Applications of Digital Media Production.

Advanced topics in digital media theory, design, and development. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: Radio-Television-Film 344M.

**Topic 1: Advanced Visual Effects and Motion Graphics.** Explores advanced subjects, concepts, and techniques in compositing, image and projection, digital painting, and animation. Radio-Television-Film 344N (Topic: Advanced Visual Effects) and 344N (Topic 1) may not both be counted. Offered on the letter-grade basis only. Additional prerequisite: Radio-Television-Film 344M (Topic 3: Introduction to Visual Effects and Motion Graphics).

**Topic 2: Advanced Effects: Modeling.** Offered on the letter-grade basis only. Additional prerequisite: Radio-Television-Film 344M (Topic 6) (or Radio-Television-Film 344M (Topic 2: Computer Graphics for Film and Games)).

**Topic 3: Advanced Effects: Rigging.** Offered on the letter-grade basis only. Additional prerequisite: Radio-Television-Film 344M (Topic 6) (or Radio-Television-Film 344M (Topic 2: Computer Graphics for Film and Games)).

**Topic 4: Undergraduate Animation Thesis.** Each student will produce a two- to ten-minute animated short film. Radio-Television-Film 344N (Topic: Undergraduate Animation Thesis) and 344N (Topic 4) may not both be counted. Offered on the letter-grade basis only. Additional prerequisite: One of the following: Radio-Television-Film 343N, 344M (Topic 3), 344N (Topic 1), 351C, 351D, or 366M.

**Topic 7: Advanced 3D Animation.** Hands-on approach to learning character animation in Maya. Introduction to the fundamental methods needed to create animated characters, including techniques used to create motion. Only one of the following may be counted: Radio-Television-Film 344N (Topic: Character Animation in 3D), 344N (Topic 5), and 344N (Topic 7). Offered on the letter-grade basis only. Additional prerequisite: Radio-Television-Film 344M (Topic 6: Introduction to 3D Animation) or 344M (Topic 2: Introduction to 3D Animation).

#### RTF 344T. Game Development Capstone.

Capstone courses in game development. Three lecture hours and three lab hours per week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and consent of instructor.

Topic 1: Game Development Capstone: Two Dimensional Games. Radio-Television-Film 344N (Topic 6: Game Development Capstone: 2D Games) and 344T (Topic 1) may not both be counted. Topic 2: Game Development Capstone: Three Dimensional Games. Radio-Television-Film 344N (Topic: GAME DEVEL CAPSTONE: 3D GAMES) and 344T (Topic 2) may not both be counted.

#### RTF 345. Studies in Film History.

Critical assessment of major genres, periods, movements, and personalities in United States and international film history. Three lecture hours and one two-and-one-half-hour screening a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upperdivision standing.

Topic 1: Third World Cinema: Asia and the Middle East.

Topic 2: Israeli Cinema and Television.

Topic 3: History of Mexican Cinema.

Topic 4: Latin American Cinema.

Topic 5: Third World Cinema: Africa and the Americas.

**Topic 6: Experimental Film and Video.** Critical assessment of the history and current trends in experimental film and video. Radio-Television-Film 331K (Topic: Experimental Film and Video) and 345 (Topic 6) may not both be counted.

**Topic 7: British Film and Television.** Radio-Television-Film 345 (Topic: History of British Film) and RTF 345 (Topic 7) cannot both be counted. **Topic 8: Social Documentary.** Radio-Television-Film 345 (Topic: Social Documentary) and 345 (Topic 8) may not both be counted.

**Topic 9: Women Behind The Camera.** Radio-Television-Film 345 (Topic: Women Behind the Camera) and 345 (Topic 9) may not both be counted.

**Topic 10: Chinese Auteurs.** Radio-Television-Film 345 (Topic: Chinese Auteurs) and 345 (Topic 10) may not both be counted.

#### RTF 345C. Experimental Media and the Art of Disruption.

Explores experimental and avant-garde media. Through the intentional disruption of mainstream media aesthetics and conventions, experimental media artists confront, question, and recontextualize the traditional narratives and conventions of commercial media. Examines a portfolio of experimental work across genre, including narrative and non-narrative film, title sequences, the use of media performance and gallery

installations, public art, online interactive formats, and experimental video games. Three lecture hours per week for one semester. Radio-Television Film 345 (Topic: Exper Media, Art of Disruption) and 345C may not both be counted. Prerequisite: Upper-division standing.

#### **RTF 346. Introduction to Editing.**

Theory and practice of video and film editing techniques. Three lecture hours and one and one-half laboratory hours a week for one semester. Prerequisite: Upper-division standing, Radio-Television-Film 317 and 318 with a grade of at least B- in each, and six additional semester hours of lower-division coursework in radio-television-film.

#### RTF 347C. The Business of Media.

Survey of business practices in film, television, music, and digital media industries: development, production, distribution, and exhibition. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Upper-division standing; additional prerequisites vary with the topic.

**Topic 3: The Entertainment Industry: The Big Picture.** Restricted to students admitted to the Semester in Los Angeles Program. Explores the commercial challenges that face producers and network and studio executives, and addresses the continual struggle between creativity and the bottom line. Taught in Los Angeles, California. Only one of the following may be counted: Communication 324 (Topic: How Hollywood Works-L A), 324 (Topic 1: How Hollywood Works-Los Angeles), Radio-Television-Film 347C (Topic: How Hollywood Works-L A), 347C (Topic 1: How Hollywood Works-Los Angeles), 347C (Topic 3).

#### **RTF 347D. Media Industries.**

Examination of the economics and the production, research, management, and distribution practices of the film and electronic media industries. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing

#### RTF 347E. Advanced Editing.

In-depth look at the principles, techniques, and aesthetics of editing; building a broad background for students' future professional development. Designed to provide a basic-to-intermediate level of familiarity with Avid editing software, by discussing and working on provided narrative, documentary, and technical exercises; various approaches to editing style in each case. Three lecture hours and one two-and-one-half-hour film screening a week for one semester. Only one of the following may be counted: Radio-Television-Film 344 (Topic: Advanced Editing), 346C, 346E (Topic: Advanced Editing), 347E. Prerequisite: Radio-Television-Film 346 with a grade of at least B.

#### RTF 347P. The Business of Hollywood.

Explores contemporary media industries: how media industries operate, and the "big picture" of the contemporary film, television, and digital media landscape. Large-scale issues being faced by those working in the entertainment industry - including the impact of conglomerate ownership, regulation, globalization, and digitization on creative practices and work roles. Three lecture hours and one one-anda-half-hour speaker series each week for one semester. Radio-Television-Film 347C (Topic: Business of Hollywood) and 347P may not both be counted. Prerequisite: Upper-division standing.

#### RTF 348. Studies in Media Industries.

Examination of the economics and the production, research, management, and distribution practices of the film and electronic media industries. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 2: Development Process of Film and Television-Los Angeles.** Same as Communication 324 (Topic 2). Restricted to students admitted to the Semester in Los Angeles Program. Examines the development process in both film and television; preparing pitches, coverage, and development notes; identifying strengths and weaknesses of literary material typical of that submitted to studios, networks, and production companies. Taught in Los Angeles, California. Only one of the following may be counted: Communication 324 (Topic: Development Process of Film and Television), 324 (Topic 2), Radio-Television-Film 348 (Topic: Development Process of Film and Television), 348 (Topic 2).

#### Topic 3: Inside the Music Industry-Los Angeles. Same as

Communication 324 (Topic 3). Restricted to students admitted to the Semester in Los Angeles Program. Only one of the following may be counted: Communication 324 (Topic: Inside The Music Industry), 324 (Topic 3), Radio-Television-Film 348 (Topic: Inside The Music Industry) and 348 (Topic 3).

**Topic 4: New Media and Emerging Entertainment-Los Angeles.** Same as Communication 324 (Topic 4). Restricted to students admitted to the Semester in Los Angeles Program. Explores burgeoning areas of digital entertainment including broadband, video-on-demand, interactive television, mobile entertainment, and interactive digital gaming. Taught in Los Angeles, California. Only one of the following may be counted: Communication 324 (Topic: New Media and Emerging Entertainment), 324 (Topic 4), Radio-Television-Film 348 (Topic: New Media and Emerging Entertainment), 348 (Topic 4).

#### RTF 350L, 650L. Semester in Los Angeles Internship.

Restricted to students in the Semester in Los Angeles Program. Practical work experience related to the study of film, television, radio, or other media. Students must make their own arrangements to secure relevant internships. For 350L, an average of 10 hours of work a week, for a total of at least 150 hours a semester or summer term; for 650L, an average of 20 hours of work a week, for a total of at least 300 hours a semester or summer term. Communication 350L, 650L and Radio-Television-Film 350L, 650L may not both be counted. Offered on the pass/fail basis only. Prerequisite: Upper-division standing.

#### **RTF 351C.** Introduction to Two-Dimensional Animation.

Restricted to radio-television-film majors. Theory and practice of digital graphics and animation techniques. Three lecture hours and two laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: For majors, Radio-Television-Film 318, and nine additional semester hours of coursework in radio-television-film; for others, upper-division standing.

#### RTF 351D. Advanced Two-Dimensional Animation.

In-depth study of two-dimensional animation techniques and an introduction to stop-motion animation, green screen techniques, and postproduction effects. Three lecture hours a week for one semester. Only one of the following may be counted: Radio-Television-Film 344M (Topic: Advanced Digital Animation), 344M (Topic: Two-Dimensional Animation and Motion Graphics), 351D. Prerequisite: Radio-Television-Film 351C.

#### RTF 352. Global Media and Area Studies.

Study of political, social, cultural, and economic factors affecting the use and impact of communication systems in selected regions, such as South Asia, Latin America, Middle East, Europe, East Asia, and Africa. Three lecture hours a week for one semester. Some topics may also require two and one-half film screening hours a week. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 1: Media and the Middle East.** Addresses the role of media in the Middle East, considering communication texts, processes and industries in political, social, economic, and cultural contexts. Radio-

Television-Film 342 (Topic: Media and the Middle East) and 352 (Topic 1) may not both be counted.

#### **RTF 658. Undergraduate Animation Thesis.**

Restricted to radio-television-film majors. Two-semester course in which each student will produce a two- to ten-minute animated short film as director, animator, and/or sound designer. Three lectures hours a week for two consecutive semesters. Only one of the following may be counted: Radio-Television-Film 344N (Topic: Undergraduate Animation Thesis), 344N (Topic 4), 658. Offered on the letter-grade basis only. Prerequisite: For 658A, upper-division standing; and two of the following: Radio-Television-Film 341, 341C, 344M (Topic 2), 344M (Topic 3), 344N (Topic 1), 344N (Topic 5), 344N (Topic 6), 351C, or 351D; or consent of instructor; for 658B, Radio-Television-Film 658A.

#### RTF 359. Studies in Media and Culture.

Special topics related to the critical analysis of media in cultural contexts. Three lecture hours a week for one semester. Radio-Television-Film 359 and 359S may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 3: Asian American Media Cultures.** Same as Asian American Studies 320 (Topic 4). Examines popular and critical roles, representations, and politics of Asian Americans in U.S. media including Hollywood cinema, U.S. network and cable television, Asian American independent film, and online media. Only one of the following may be counted: Asian American Studies 320 (Topic: Asian American Media Cultures), Asian American Studies 320 (Topic 4), Radio-Television-Film 359 (Topic: Asian American Media Cultures), Radio-Television-Film 359 (Topic 3). Additional prerequisite: Upper-division standing.

**Topic 5: Social Media: Growth, Uses, and Impacts.** Only one of the following may be counted: Radio-Television-Film 359 (Topic: Youth and Social Media), 359 (Topic 4), 359 (Topic 5).

**Topic 6: Gender, Race, and Sexuality in Sports Media**. Radio-Television-Film 359 (Topic 6) and 365 (Topic: Gender/Race/SexIty Sport Media) may not both be counted.

Topic 7: Race and Digital Media Culture. Radio-Television-Film 359 (Topic: Race/Digital Media Cultures) and 359 (Topic 7) may not both be counted.

#### RTF 359C. Media Archaeology.

Exploration of the media as artifacts as opposed to narratives or texts. Focuses on the materiality of media within specific socio-cultural, economic, and technological time periods each with their own modes of historic and futuristic discourse. Three lecture hours a week for one semester. Radio-Television-Film 359S (Topic: Media Archaeology) and 359C may not both be counted. Offered on the letter-grade basis only.

#### RTF 359S. Studies in Media and Culture.

Special topics related to the critical analysis of media in cultural contexts. Three lecture hours and one two-and-one-half-hour film screening a week for one semester. Radio-Television-Film 359 and 359S may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 3: Gender and Rock Culture.** Critical analysis of issues relating to media, gender, and rock culture. Radio-Television-Film 331K (Topic: Gender, Sexuality, and Rock Culture) and 359S (Topic 3) may not both be counted.

**Topic 4: Media, Memory, and History.** Critical analysis of the relationship between historical events and media.

Topic 7: Mixed Race & US Film/Media. An introduction to the evolving representation of mixed-race individuals, romance, and families and to mixed-race stars and producers in U.S. film, television, and new media

since the silent film era. Radio-Television-Film 359S (Topic 7) and 370 (Topic: Mixed Race & US Film/Media) may not both be counted. **Topic 8: Latina/os and U.S. Media.** Survey of the representation and participation of Latinas and Latinos in U.S. English-language film and television from the silent film era to the present. Also focuses on issues Latina/os face as media producers, media consumers, and media activists.

**Topic 9: Latina Feminisms and Media**. Survey of Chicana and Latina feminist scholarship, activism, and creative expression with an emphasis on Latina media production and representation in U.S. entertainment media. Only one of the following may be counted: Mexican American Studies 374 (Topic: Latina Feminisms and Media) Radio-Television-Film 359 (Topic: Latina Feminisms and Media), 359S (Topic 9), Women's and Gender Studies 324 (Topic: Latina Feminisms and Media).

**Topic 10: Gender and Media in the '60s.** Radio-Television-Film 359S (Topic: Gender and Media in the 1960s) and 359S (Topic 10) may not both be counted.

Topic 11: Brazilian Media. Radio-Television-Film 359 (Topic: Brazilian Media & Pop Culture) and 359S (Topic 11) may not both be counted. Topic 12: Gender and Fan Culture. Radio-Television-Film 359S (Topic: Gender and Fan Culture) and 359S (Topic 12) may not both be counted.

**Topic 13: Latin American Television.** Only one of the following may be counted: Radio-Television-Film 359 (Topic: Latin American Television), 359S (Topic 13), 377H (Topic: Latin American Television).

Topic 14: Latino Images in Film. Radio-Television-Film 359 (Topic: Latino Images in Film) and 359S (Topic 14) may not both be counted.

#### RTF 365. Topics in Media and Society.

Advanced topics addressing media, communication, and society. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

#### Topic 4: History of United States Latino Media.

#### Topic 5: Latin American Media.

#### Topic 7: Narrowcasting.

**Topic 8: Migration and Media**. Advanced study of global media issues, including traditional and digital media use, social inclusion, and migration to the United States from Latin America, Asia, and elsewhere. Students conduct research on the relationships between media and migration.

**Topic 9: Media Industries and Entrepreneurship.** Same as Sociology 352E. Examination of the social, political, and economic contexts in which media and culture are produced, distributed, and monetized. Emphasis on new media and communication technologies. Three lecture hours a week for one semester. Only one of the following may be counted: Radio-Television-Film 365 (Topic: Media Industries and Entrepreneurship), 365 (Topic 9), Sociology 352E, 352M (Topic: Media Industries and Entrepreneurship). Additional prerequisite: For radio-television-film majors, upper-division standing and twelve semester hours of lower-division coursework in radio-television-film; for others, consent of instructor.

**Topic 10: Globalization and Social Media.** Same as Sociology 352S. Issues surrounding the hype, myth, paradox, and reality of social media in a global context. Three lecture hours a week for one semester. Only one of the following may be counted: Asian American Studies 320 (Topic: Globalization and Social Media), Journalism 349T (Topic: Globalization and Social Media), Radio-Television-Film 331M (Topic: Globalization and Social Media), 365 (Topic 10), Sociology 321K (Topic: Globalization and Social Media), 352S. Additional prerequisite: Upper-division standing.

Topic 12: Mapping Latino Culture in East Austin. Topic 13: Activist Media.

#### RTF 365C. Media and Policy.

Advanced topics addressing media and policy in society. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 1: Media, Communication Law, and Ethics.** Contemporary ethical and policy issues facing the transforming media industries and the American public. Rooted in an understanding of the First Amendment as well as the development of communication industries, the course examines a range of topics that new media and the Internet have complicated. Radio-Television-Film 365 (Topic: Media, Communication Law, and Ethics) and 365C (Topic 1) may not both be counted.

#### RTF 365D. Media Literacy.

Advanced topics addressing media literacy and education. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 1: Digital and Information Literacy.** Exploration of the expanding nature of literacy in a digital world. Study of the ability to strategically access, analyze, evaluate, and produce communication in a variety of forms through media literacy. Radio-Television-Film 365 (Topic: New Media Literacy) and 365D (Topic 1) may not both be counted. **Topic 2: Children, Youth, and Media.** Three lecture hours a week for one semester. Only one of the following may be counted: Radio-Television-Film 334 (Topic: Children and Media), 365D (Topic: Children, Youth and Media), and 365D (Topic 2).

**Topic 3: Media Literacy and Civic Engagement**. Only one of the following may be counted: Radio-Television-Film 301N (Topic: Media Literacy), 302C, 365D (Topic: Media Literacy and Civic Engagement), or 365D (Topic 3).

#### RTF 366. Introduction to Field and Studio Production.

Restricted to radio-television-film majors. Basic theory and techniques in single-camera video production; individual and collective production assignments, with emphasis on technical proficiency, examination of the entire production process, visualization of ideas, and critical evaluation of the visual text. Three lecture hours and six laboratory hours a week for one semester. May not be taken concurrently with Radio-Television-Film 340 or 366K. Prerequisite: Upper-division standing; Radio-Television-Film 317 and 318 with a grade of at least B in each; and six semester hours of lower-division coursework in radio-television-film with a grade of at least C in each course.

#### **RTF 366K. Introductory Production.**

Restricted to radio-television-film majors. Three lecture hours and three laboratory hours a week for one semester. May not be taken concurrently with Radio-Television-Film 340 or 366. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; Radio-Television-Film 317 and 318 with a grade of at least B- in each; and six semester hours of lower-division coursework in radio-television-film.

**Topic 2: Narrative Production.** A workshop in visual storytelling and non-dialogue filmmaking.

**Topic 3: Documentary Production.** Workshop in contemporary documentary practice, including directing, producing, cinematography, editing, sound recording, and distribution.

Topic 4: East Austin Stories. Students work in small production groups and make documentaries in and about East Austin for public screening at the end of the semester and for Webcasting.
Topic 5: Music Film Production. Radio-Television-Film 366K (Topic: Music Film Production) and 366K (Topic 5) may not both be counted.
Topic 6: Experimental Film. Radio-Television-Film 366K (Topic: Experimental Film) and 366K (Topic 6) may not both be counted.

**Topic 7: Creating a Web Series.** Radio-Television-Film 366K (Topic: Creating a Web Series) and 366K (Topic 7) may not both be counted.

#### **RTF 366M.** Introduction to Three-Dimensional Production.

Restricted to students in radio-television-film. An introduction to the aesthetics, science, theory and practice of three-dimensional production via lectures, screenings, and some hands-on production work in groups. No previous three-dimensional experience is required. Three lecture hours and three laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upper-division standing, Radio-Television-Film 317 and 318 with a grade of at least B- in each, and six additional semester hours of lower-division coursework in radio-television-film.

#### RTF 367D. Directing Workshop.

Restricted to radio-television-film majors. Explores the role of the director, focusing on the director-actor relationship, narrative structure, and visual language. Three lecture hours a week for one semester. Only one of the following may be counted: Radio-Television-Film 344 (Topic: Directing Workshop), 366D (Topic: Directing Workshop), 367D Prerequisite: Upper-division standing, Radio-Television-Film 317 and 318 with a grade of at least B- in each, and six additional semester hours of lower-division coursework in radio-television-film.

#### RTF 367K. Producing Film and Television.

Comprehensive consideration of the production process from the producer's standpoint regarding fiscal and creative management. Includes development and preproduction and production planning using computer budgeting and scheduling. Three lecture hours a week for one semester. Prerequisite: For Radio-Television-Film majors, upper-division standing, Radio-Television-Film 317 and 318 with a grade of at least B- in each, and six additional hours of coursework in Radio-Television-Film; for others, upper-division standing.

#### RTF 367M. Advanced Narrative: 16-mm.

Restricted to radio-television-film majors. Theory and techniques in 16-mm film synchronous sound production; individual and collective production assignments, with emphasis on technical proficiency, examination of entire production process, visualization of ideas, and critical evaluation of the visual text. Three lecture hours and three laboratory hours a week for one semester. Radio-Television-Film 367L and 367M may not both be counted. Prerequisite: Upper-division standing, and Radio-Television-Film 366K (Topic 2).

#### RTF 367P. Advanced Producing.

Restricted to radio-television-film majors. Advanced practical application of the business and creative skills used to produce and distribute media projects in the marketplace. Three lecture hours a week for one semester. Radio-Television-Film 344 (Topic: Advanced Producing) and 367P may not both be counted. May be repeated for credit when the topics vary. Prerequisite: Radio-Television-Film 367K.

#### RTF 367Q. Script to Screen.

Restricted to radio-television-film majors. Examination of the behind the scenes production of feature films. Includes examination of scripts, shot lists, storyboards, shooting schedules, visual effects and behindthe-scenes footage. Three lecture hours a week for one semester. Radio-Television-Film 367 (Topic: Adv. Producing Script to Screen) and 367Q may not both be counted. Prerequisite: Radio-Television-Film 367K, or 366D, or 333.

#### **RTF 368. Advanced Production Topics.**

Restricted to radio-television-film majors. Advanced study of production crafts in film, television, and other digital media. Three lecture hours and

three laboratory hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 3: Advanced Production.** Prerequisite: Radio-Television-Film 343 (Topic 1), 343 (Topic 2), 343N, or 367L.

**Topic 5: Projects Course: 3D.** Restricted to Radio-Television-Film majors. Three lecture hours and a week for one semester with additional hours to be arranged. Additional prerequisite: Radio-Television-Film 343N.

**Topic 6: Immersive Media Production**. Exploration of the theory and practice of immersive media: stereoscopy, artificial environments, and virtual reality. Additional prerequisite: Radio-Television-Film 344M (Topic 2), or 344M (Topic 3), or 366M, or consent of instructor.

#### RTF 368C. Advanced Directing.

Restricted to radio-television-film majors. Creation of collaborative, performance-based works that emphasize simplicity and ingenuity in image and sound choices. Works will adhere to a production code that is a modified version of the Dogme 95 Vow of Cinematic Chastity. Three lecture hours and three laboratory hours a week for one semester. Radio-Television-Film 368 (Topic 4: Advanced Directing) and 368C may not both be counted. Offered on the letter-grade basis only. Prerequisite: Radio-Television-Film 366D.

#### RTF 368D. Advanced Cinematography.

Restricted to radio-television-film majors. Study of the art of cinematography beyond the basic principles of camera and lighting. Group production of short films to explore the cinematic tools used to create an overall visual approach to storytelling. Examination of film genre, color, texture, lens continuity, aspect ratio, and practical on set strategies and challenges. Three lecture hours and three laboratory hours a week for one semester. Radio-Television-Film 368 (Topic: Advanced Cinematography) and 368D may not both be counted. Prerequisite: Upper-division standing, and either Radio-Television-Film 343D (or Radio-Television-Film 368 (Topic 2: Cinematography)) or Radio-Television-Film 343 (Topic 1: Advanced Narrative Production).

#### **RTF 368S. Undergraduate Thesis.**

Restricted to radio-television-film majors. Advanced film production or media studies research. Three lecture hours a week for one semester, with studio hours to be arranged. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and consent of instructor; Prerequisites vary with the topic.

Topic 1: Film Production Thesis. Intensive production workshop, designed for students who wish to produce a film for a portfolio. Additional prerequisite: Radio-Television-Film 343, or 367L, or 368. Topic 2: Media Studies Thesis. An independent research project based on primary data, resulting in a written summary of theoretical foundations, methodological approach, results, and a discussion. Topic 3: Screenwriting Thesis. Advanced screenwriting for film or television. Intensive writing workshop, designed for students who wish to produce a polished script suitable for submission to agents and competitions. Radio-Television-Film 368 (Topic: Writing Thesis) and 368S (Topic 3) may not both be counted. Additional prerequisite: Radio-Television-Film 369

#### RTF 369. Advanced Screenwriting.

Restricted to radio-television-film majors. Students develop and write original screenplays. Includes advanced study of screenplay structure, critical analysis of student and professional work, and intensive writing each week toward a completed script. Three lecture hours a week for one semester. Students may not enroll in more than two sections of any Radio-Television-Film 369 course in the same semester. May be repeated for credit when the topics vary. Prerequisite: Radio-Television-Film 333 with a grade of at least B-.

**Topic 1: Advanced Screenwriting for Feature Films.** Students may not enroll in more than one section of Radio-Television-Film 369 (Topic 1) in the same semester.

Topic 2: Advanced Screenwriting for Television.

**Topic 3: Advanced Screenwriting: Television Pilots.** Radio-Television-Film 369 (Topic: Adv Screenwriting: TV Pilots) and 369 (Topic 3) may not both be counted.

**Topic 4: Advanced Screenwriting: Television Specs.** Radio-Television-Film 369 (Topic: Adv Screenwriting: TV Specs) and 369 (Topic 4) may not both be counted.

**Topic 5: Advanced Screenwriting: Independent Films.** Radio-Television-Film 369 (Topic: Adv Scrnwrt for Film: Indies) and 369 (Topic 5) may not both be counted.

**Topic 6: Advanced Screenwriting: Science Fiction and Horror.** Radio-Television-Film 369 (Topic: Adv Screenwrtng: Sci-Fi/Horror) and 369 (Topic 6) may not both be counted.

#### RTF 370. Film Analysis and Criticism.

Analysis of critical methods, selected films, and selected critics. Three lecture hours and one two-and-one-half hour film screening a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 1: Comedy in Film and Media.** Additional prerequisite: Radio-Television-Film 370 (Topic: Comedy in Film and Media) and 370 (Topic 1) may not both be counted.

Topic 2: Animation Studies. Radio-Television-Film 331K (Topic: Animation Studies) and 370 (Topic 2) may not both be counted. Topic 3: Asian Horror Film. Radio-Television-Film 370 (Topic: Asian Horror Film) and 370 (Topic 4) may not both be counted.

**Topic 4: Film Noir.** Radio-Television-Film 370 (Topic: Film Noir) and 370 (Topic 4) may not both be counted.

**Topic 5: Films of Clint Eastwood**. Radio-Television-Film 370 (Topic: Films of Clint Eastwood) and 370 (Topic 5) may not both be counted. **Topic 6: Films of Alfred Hitchcock**. Radio-Television-Film 370 (Topic: Film Anly and Crit: Hitchcock) and 370 (Topic 6) may not both be counted.

**Topic 7: Films of Martin Scorsese.** Radio-Television-Film 370 (Topic: Films of Scorsese) and 370 (Topic 7) may not both be counted.

**Topic 8: Independent American Cinema.** Radio-Television-Film 370 (Topic: Independent American Cinema) and 370 (Topic 8) may not both be counted.

#### RTF 377H. Advanced Topics in Media Studies.

Focus on specialized topics and issues in media history, theory, and criticism. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and a University grade point average of at least 3.0.

**Topic 1: Media and Popular Culture.** Radio-Television-Film 370 (Topic: Media and Popular Culture) and 377H (Topic 1) may not both be counted.

**Topic 2: Queer Media Studies.** Same as Women's and Gender Studies 335 (Topic 16). Introduction to the critical analysis of queer media culture. Explores the dominant strategies used by the media industries to represent members of the LGBTQI community and their issues, as well as those utilized by lesbian, gay, bisexual, transgendered, queer, and intersexed folks in practices of selfrepresentation. Also examines media reception practices among queer folks, as well as the alternative media economies developed by members of the LGBTQI community, and the intersections of queer identity, queer politics, and media culture. Only one of the following may be counted: Radio-Television-Film 359S (Topic: Queer Media Studies), 359S (Topic 5), 377H (Topic 2), Women's and Gender Studies 324 (Topic: Queer Media Studies), 335 (Topic 16).

# RTF 377S. Advanced Topics in Media Studies with Screenings.

Focus on specialized topics and issues in media history, theory, and criticism. Three lecture hours and one two-and-one-half-hour film screening a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and a University grade point average of at least 3.0.

**Topic 1: Landscape and Cinema.** Radio-Television-Film 345 (Topic: Landscape and Cinema) and 377S (Topic 1) may not both be counted.

#### RTF 178. Radio-Television-Film Internship.

Restricted to radio-television-film majors. Practical work experience related to the study of film, television, radio, or other media. Students must make their own arrangements to secure relevant internships. The equivalent of ten lecture hours a week for one semester. May be repeated, but only one hour may be counted toward the Bachelor of Science in Radio-Television-Film. Offered on the pass/fail basis only. Prerequisite: Radio-Television-Film 330L and consent of the internship coordinator.

#### RTF 378H. Honors Tutorial Course.

Restricted to radio-television-film majors. Intensive reading, research, and/or production project. Individual instruction. May be taken twice for credit. May be repeated for credit. Prerequisite: Upper-division standing, twelve semester hours of lower-division coursework in radio-television-film, a University grade point average of at least 3.00, a grade point average in radio-television-film of at least 3.50, and consent of the department.

# **College of Education**

Sherry Field, PhD, Interim Dean Beth Maloch, PhD, Associate Dean for Teacher Education, Student Affairs, & Administration Tasha Beretvas, PhD, Interim Associate Dean for Research & Graduate Studies Richard Hogeda, M.ED, Assistant Dean for Student Affairs C.J. Keudell, M.S., Assistant Dean for Financial Affairs Stacey Oliver, MAT, Assistant Dean for Development https://education.utexas.edu

# **General Information**

### Mission

The University of Texas at Austin, through the College of Education, is committed to the preparation of teachers and other educators who are dedicated to the employment and advancement of education for all people. In pursuing this mission, the College of Education performs several functions.

It is a professional school offering two teacher certification degrees. The Bachelor of Science in Applied Learning and Development allows students to pursue teacher certification for elementary (early childhood through grade six) generalist, bilingual generalist, all-level (early childhood through grade 12) or generic special education certification, or all-level physical education certification. The Bachelor of Science in Kinesiology and Health offers a major that leads to all-level physical education certification.

The college provides the professional sequence of education courses and serves as the certification agent for all University students pursuing certification to teach in Texas, whether they are enrolled in the College of Education or in another division of the University. See Preparation for Teacher Certification (p. 16) for more information. Accountability information for the teacher preparation program is given in *General Information* (http://catalog.utexas.edu/general-information/academicpolicies-and-procedures/teacher-certification).

The college also offers programs that do not lead to teacher certification. These programs, in youth and community studies, athletic training, exercise science, health promotion and behavioral science, physical culture and sports, and sport management, are designed to meet the professional needs of public and private educational and community service agencies and to prepare students for advanced study.

As a unit of the Graduate School, the College of Education offers courses and curricula leading to advanced professional certificates and to master's and doctoral degrees in education. It also provides in-service training and consulting services for those engaged in the educational professions.

Departments in the college offer courses in general education as well as in various specialties suitable for students pursuing vocational objectives other than teaching.

The college is also a center for research, experimentation, and a wide variety of direct services to school systems and other educational and public service enterprises.

## Facilities

The instructional and research programs of the College of Education are carried out in five buildings. The primary facility, the George I. Sánchez Building, contains classrooms, extensive computer facilities, electronic media resources, observation rooms, a learning technology center, a distance learning classroom, and faculty offices. Bellmont Hall, the primary facility for the Department of Kinesiology and Health Education, houses classrooms, research and computer laboratories, gymnasium and locker facilities, racquet sport courts, and faculty offices. College of Education faculty members and programs are also housed in Gregory Gymnasium and the Lee and Joe Jamail Texas Swimming Center, and the North End Zone.

# Financial Assistance Available through the College

Scholarships as well as graduate fellowships and assistantships are available to students in the College of Education. Application for all undergraduate awards and some graduate awards should be made to the Office of the Dean, George I. Sánchez Building 216; graduate students should also inquire in their departmental offices. Generally, applications are accepted online in March for the following academic year.

### **Student Services**

The Office of the Dean of the College of Education provides a variety of student services, including maintenance of student records, academic counseling, certification counseling, and official evaluations of the student's academic standing and progress toward a degree. Students are encouraged to contact the office whenever they have questions about degree requirements, academic standing, teacher certification, general University regulations, or registration. The office is also a good source of general information and referral that students are urged to use when they have questions or problems of any nature.

### Academic Advising

The College of Education encourages all students to see their advisers at least once a semester for a comprehensive discussion of their programs. Academic advisers are available in George I. Sánchez Building 216.

### **Career Services**

The College of Education offers career services to assist University students in making informed career choices. Education Career Services makes job search materials, events, and counseling accessible to students on a regular basis. Information about these services is available at https://education.utexas.edu/about/college-offices/career-services.

As a complement to the assistance available from the college, the University's Sanger Learning Center and the Center for Strategic Advising and Career Counseling in the School of Undergraduate Studies provide comprehensive career services to all students. The centers offer professional assistance to all University students in choosing or changing their majors or careers, seeking an internship, and planning for the job search or for graduate study.

## **Student Organizations**

The Education Council is the official channel for student participation in policy formulation and evaluation and in development of student activities in the college. Voluntary organizations in the college include the Bilingual Education Student Organization, the Texas Health Promotion Club, the Kinesiology Club, Longhorn Athletic Training Student Association, Minorities in Education, the Student Council for Exceptional Children, and Teachers of Tomorrow. Pi Lambda Theta, Phi Delta Kappa, and Kappa Delta Pi are honorary organizations for men and women.

# Admission and Registration

### Admission

Admission and readmission of undergraduate students to the University is the responsibility of the director of admissions. Information about admission to the University is given in *General Information* (http:// catalog.utexas.edu/general-information/admission/undergraduate-admission).

Information about admission to teacher preparation programs and to majors in the Department of Kinesiology and Health is available in the Office of the Dean, George I. Sánchez Building 216.

Admission to majors in kinesiology is restricted for internal transfer students. Students should see an adviser in the Office of the Dean, George I. Sánchez Building 216 for information.

# Admission to the Professional Development Sequence

All students seeking teacher certification must complete a sequence of professional development courses. Admission to the Professional Development Sequence is restricted. Space availability may be a factor in the admission decision, as well as academic performance, completion of prerequisite courses, documented evidence of proficiency in reading and in oral and written communication, and the number of hours the student needs, at the time of application, to complete the program.

For students seeking early childhood through grade six, all-level generic special education, or all-level physical education certification, admission to the Professional Development Sequence is competitive and there is a specific University grade point average, as well as mandated grades in prerequisite courses required. Additionally, students seeking early childhood through grade six and all-level generic special education certification may only lack one class outside the sequence when they enter the Professional Development Sequence. To progress within the sequence, and to complete the sequence, the student must maintain a specific University grade point average and must earn the appropriate grade in each course in the sequence. Students are encouraged to speak to an adviser in the Office of the Dean, George I. Sánchez Building 216 for additional information about these requirements.

For students in other teacher certification programs, requirements for admission to and continuation in the Professional Development Sequence are set by the college in which the student majors.

## Registration

General Information (http://catalog.utexas.edu/general-information/ registration-tuition-and-fees) gives information about registration, adding and dropping courses, transfer from one division of the University to another, and auditing a course. The *Course Schedule* (http:// registrar.utexas.edu/schedules), published before registration each semester and summer session, includes registration instructions, advising locations, and the times, places, and instructors of classes. The *Course Schedule* (http://registrar.utexas.edu/schedules) and *General Information* (http://catalog.utexas.edu/general-information) are published on the registrar's website (http://registrar.utexas.edu).

# Academic Policies and Procedures

### Honors

### **University Honors**

The designation University Honors, awarded at the end of each longsession semester, gives official recognition and commendation to students whose grades for the semester indicate distinguished academic accomplishment. Both the quality and the quantity of work done are considered. Criteria for University Honors are given in *General Information*.

### **Graduation with University Honors**

Students who, upon graduation, have demonstrated outstanding academic achievement are eligible to graduate with University Honors. Criteria for graduation with University Honors are given in *General Information*.

# Graduation

## **Special Requirements of the College**

All students must fulfill the General Requirements (p. 20) for graduation. In addition, students in the College of Education must be registered in the college either in residence or in absentia the semester or summer session the degree is to be awarded and must apply to the dean for the degree no later than the date specified in the official academic calendar. The student must have an official degree audit on file prior to applying for the degree.

## Applying for Graduation

Each student seeking a degree from the College of Education should apply for an official degree audit in the Student Dean's Office, George I. Sánchez Building 216. The degree audit is essential to ensure that the student meets all the degree requirements given in a catalog under which he or she is eligible to graduate.

In the final semester or summer session, a candidate for graduation must apply for the degree by the deadline given in the official academic calendar.

# **Degrees and Programs**

### **General Requirements**

- All College of Education students seeking teacher certification must complete the entire Professional Development Sequence of coursework in residence. Residence credit includes only courses taken at the University; it does not include credit by examination, courses taken by extension or correspondence, or courses taken at another institution.
- 2. State of Texas teacher certification requirements are governed by the Texas Education Agency and are subject to change. Students must adhere to current teacher certification requirements, even if they differ from those listed in the University catalogs.
- 3. Except as otherwise indicated, credit by examination is treated like any other earned credit in meeting degree requirements.
- 4. With the exception of credit earned by examination, each course counted toward the degree or toward certification requirements must be taken on the letter-grade basis, unless the course is offered only on the pass/fail basis.

5. To graduate, all students must have a University grade point average of at least 2.00.

## Applicability of Certain Courses

### **Physical Activity Courses**

Physical activity (PED) courses are offered by the Department of Kinesiology and Health Education. Up to three semester hours of physical activity coursework may be counted as electives toward any College of Education degree. All physical activity courses are counted among courses for which the student is enrolled, and the grades are included in the grade point average.

### **ROTC Courses**

A maximum of 12 semester hours of credit in air force science, military science, or naval science may be used as free electives in any degree plan of the College of Education.

# Concurrent Enrollment and University Extension Courses

In the semester they plan to graduate, students may not take any course to be counted toward the degree at another institution or through University Extension; students who plan to graduate at the end of the summer session may request approval to take transfer work only in the first summer term.

## **Teacher Certification**

Please see the Preparation for Teacher Certification (p. 16).

### **UTeach-Urban Teachers**

UTeach-Urban Teachers is a teacher preparation program for students seeking teacher certification for secondary in English or social studies. UTeach-Urban Teachers offers a three-semester program for undergraduate students, beginning the summer before their senior year, for students working towards a bachelor's degree in English, history, geography, government, economics, or other humanities disciplines. UTeach-Urban Teachers also offers a Masters of Education degree program with teacher certification for students seeking teacher certification while pursuing a masters. These programs are designed to help English and social studies teacher candidates develop knowledge, skills, and dispositions to support teaching and learning in linguistically and culturally diverse urban settings. Program advising is housed in the College of Education. Information is available on the UTeach-Urban Teachers website (https://education.utexas.edu/departments/ curriculum-instruction/uteach-urban-teachers) and from the College of Education advising office.

State of Texas teacher certification requirements are governed by the Texas Education Agency and are subject to change. Students must adhere to current teacher certification requirements, even if they differ from those listed in the University catalogs.

For students seeking secondary teacher certification in English :

Requirements		Hours	
EDC 339E	Secondary School Literacy across the Disciplines		3
ALD 327	Sociocultural Influences on Learning		3
EDC 370S	Secondary School Subjects (Topic 1: Advanced Methods in English, Language Arts, and Reading)		3

EDC 351S	Secondary School Teaching Practicum	3
EDC 651S	Secondary School Teaching	6
	Practicum	

For students seeking secondary teacher certification in social studies:

Requirements		Hours	
EDC 339E	Secondary School Literacy across the Disciplines		3
ALD 327	Sociocultural Influences on Learning		3
EDC 370S	Secondary School Subjects (Topic 3: Advanced Methods in Social Studies)		3
EDC 351S	Secondary School Teaching Practicum		3
EDC 651S	Secondary School Teaching Practicum		6

## Bachelor of Science in Applied Learning and Development

The curriculum for the degree has four components: (a) the Universitywide core curriculum; (b) prescribed work for the Bachelor of Science in Applied Learning and Development; (c) major requirements; and (d) electives. Students choose one of three majors: early childhood through grade six generalist, which can lead to early childhood through grade six generalist certification or early childhood through grade six bilingual generalist certification; all-level generic special education, which can lead to all-level generic special education; or youth and community studies, which does not lead to teacher certification.

The youth and community studies major requires 120 hours of coursework; the early childhood through grade six ESL generalist major requires 124 hours of coursework; and the all-level generic special education major requires 127 hours of coursework. Students in all majors must complete at least 36 hours of upper-division coursework.

## **Core Curriculum**

All students must complete the University's Core Curriculum. In the process of fulfilling the core curriculum and other degree requirements, all students are expected to complete the Skills and Experience flags (p. 23).

- 1. Writing: three flagged courses beyond Rhetoric and Writing 306 or its equivalent. Applied Learning and Development 328 carries a writing flag.
- 2. Quantitative Reasoning: one flagged course
- 3. Global cultures: one flagged course
- 4. Cultural diversity in the United States: one flagged course. Applied Learning and Development 327 carries a cultural diversity in the United States flag.
- 5. Ethics: one flagged course
- 6. Independent Inquiry: one flagged course

In some cases, a course that is required for the Bachelor of Science in Applied Learning and Development may also be counted toward the Core Curriculum; these courses are identified above. Courses used to fulfill flag requirements may also be used to fulfill other requirements.

### **Prescribed Work**

All students must complete the following requirements. The youth and community studies major requires modifications to the prescribed work; these are described in the section for the major below.

- 1. Information Studies 322T.
- 2. Psychology 301. This course may also be used to fulfill the social and behavioral sciences requirement of the Core Curriculum.
- Natural Sciences 306J, 306K, and 306L. These courses may also be used to fulfill parts I and II of the science and technology requirement of the Core Curriculum. In addition, students must complete Natural Sciences 306M.
- 4. Mathematics 316K and 316L.
- 5. Foreign language: Students must demonstrate proficiency in a single foreign language equivalent to that shown by completion of the second college semester in the language; proficiency is usually shown by earning credit for language courses 601D and 610D or the equivalent. Prospective Texas teachers are strongly encouraged to take Spanish to fulfill the language requirement.

Although the foreign language requirement is the attainment of a certain proficiency, rather than the completion of a specified number of hours, the courses taken to gain this proficiency are not electives and may not be taken on the pass/fail basis. Any part of the requirement may be fulfilled by credit by examination.

Students who completed two years of a single foreign language in high school and who are not pursuing teacher certification may substitute three courses in specific multicultural and language/ communication courses for the foreign language requirement. A list of the acceptable substitute courses is available in the Student Dean's Office, George I. Sánchez Building 216.

### Major Requirements Early Childhood Through Grade Six ESL Generalist

Students who have completed the early childhood through grade six ESL generalist major are eligible to teach pre-kindergarten through grade six after meeting additional state requirements.

For this major, students must complete the following:

- 1. Coursework in applied learning and development:
  - a. Three semester hours in cognition and learning chosen from Applied Learning and Development 320 and 321
  - b. Applied Learning and Development 322
  - c. Applied Learning and Development 327
  - d. Applied Learning and Development 328
  - e. Applied Learning and Development 329
  - f. Health Education 329K
  - g. Kinesiology 314
- A curricular specialization consisting of Curriculum and Instruction 370E (Topic 1: *Reading*), 370E (Topic 2: *Language Arts*), 370E (Topic 20: *Teaching English as a Second Language*), and either Special Education 378T (Topic: *Reading Difficulties*) or Curriculum and Instruction 371R
- The Professional Development Sequence described below. Admission to the Professional Development Sequence is restricted; admission requirements are given in Admission to the Professional Development Sequence (p. 155).

- a. Methods courses: Curriculum and Instruction 370E (Topic 3: *Science*), 370E (Topic 4: *Social Studies*), and 370E (Topic 5: *Mathematics*)
- b. Curriculum and Instruction 331E
- c. Curriculum and Instruction 371G
- d. Curriculum and Instruction 950E

### **All-Level Generic Special Education**

Students who have completed the all-level generic special education major are eligible to teach in special education classrooms from prekindergarten through grade twelve after meeting additional state requirements.

For this major, students must complete the following:

- 1. Coursework in applied learning and development and related areas:
  - a. Three semester hours in human development chosen from Human Development and Family Sciences 313 and Psychology 304
  - b. Three semester hours in cognition and learning chosen from Applied Learning and Development 320 and 321
  - c. Applied Learning and Development 322 and 327
- Prescribed work in special education: Special Education 332, 337, 372, 375C, 376, 378D, 378E, 378R, 378S, 378T (Topic: Teaching Math to Students with Disabilities).
- 3. The Professional Development Sequence described below. Admission to the Professional Development Sequence is restricted; admission requirements are given in Admission to the Professional Development Sequence (p. 155).
  - a. Curriculum and Instruction 370E (Topic 5: *Mathematics*), 370E (Topic 1: *Reading*), 370E (Topic 2: *Language Arts*), and 370E (Topic 20: Teaching English as a Second Language.
  - b. Curriculum and Instruction 331E
  - c. Special Education 960

### Youth and Community Studies

Completion of a major in youth and community studies does not entitle the student to receive a teaching certificate.

- 1. The Prescribed Work, with the following modifications:
  - a. A course in English or rhetoric and writing may be counted in place of Information Studies 322T. The course used to fulfill the humanities requirement of the core curriculum may not also be counted toward this requirement.
  - b. Students must take Educational Psychology 318T (Topic 5: Introduction to Career Planning)
  - c. Students are not required to take Natural Sciences 306J, 306K, 306L, and an additional natural sciences or computer science course. However, they must complete the science and technology, part I and part II, requirements of the Core Curriculum.
  - d. Mathematics 316K and 316L are not required.
  - e. Students must take a three-semester-hour entrepreneurship course.
- Coursework in applied learning and development and related fields:
   a. Applied Learning and Development 320, 322, 327, 329, and 331
  - b. Applied Learning and Development 321 or Educational Psychology 350G
  - c. Health Education 329K

- d. Three semester hours of coursework in kinesiology or health education
- 3. Either a specialization in the Department of Kinesiology and Health Education, a minor outside of Applied Learning and Development, a certificate, or a track in a second field of study which consist of a minimum of 15 hours of coursework, six of which must be upper-division. No more than six hours in the minor may also be counted toward other degree requirements. Information about approved areas of study and specific courses that may be used is available in the Student Dean's Office, George I. Sánchez Building 216.
- 4. Professional concentration: Fifteen semester hours selected from one of the following five concentrations: Coaching, Early Childhood, Physical Education Activity, Special Populations, and Youth and Social Services. A list of courses in each concentration is available in the Student Dean's Office, George I. Sánchez Building 216.

### **Electives**

Additional elective coursework may be needed to provide the total number of semester hours required for the student's major. Students in all majors must complete at least 36 hours of upper-division coursework.

# Bachelor of Science in Athletic Training

Students who plan to major in athletic training must be admitted to the Athletic Training Program (ATP). Admission is based on a competitive application process. The student's grade point average and completion of prescribed coursework are factors in the admission decision. Applicants must also participate in the Directed Observation Program, meet a set of technical standards, pass a health assessment/ physical examination, provide proof of immunizations and vaccinations, submit letters of recommendation, and submit additional application documents. More information about the admission process and requirements is available from an academic adviser and at http:// www.edb.utexas.edu/education/departments/undergrad/at/atep/.

In addition to completing the coursework associated with the athletic training major, students in the ATP must participate in clinical rotations and become adept in a set of educational competencies and clinical proficiencies. Students who plan to take the Board of Certification (BOC) examination or the state licensure examination for athletic trainers must complete the ATP.

The curriculum for the degree has four components: (a) the Universitywide core curriculum; (b) prescribed work; (c) major requirements; and (d) electives. A total of at least 120 semester hours of coursework is required; at least 36 hours must be in upper-division courses.

### **Core Curriculum**

All students must complete the University's Core Curriculum. In the process of fulfilling the core curriculum and other degree requirements, all students are expected to complete the Skills and Experience flags (p. 23).

- 1. Writing: three flagged courses beyond Rhetoric and Writing 306 or its equivalent. Kinesiology 346 carries a writing flag.
- 2. Quantitative Reasoning: one flagged course. Kinesiology 320 carries a quantitative reasoning flag.
- 3. Global cultures: one flagged course
- 4. Cultural diversity in the United States: one flagged course.

- 5. Ethics: one flagged course. Kinesiology 346 carries an ethics flag
- 6. Independent Inquiry: one flagged course

In some cases, a course that is required for the Bachelor of Science in Athletic Training may also be counted toward the core curriculum; these courses are identified below. Courses used to fulfill flag requirements may also be used to fulfill other requirements.

### **Prescribed Work**

- 1. *Writing:* Three courses with a writing flag. These courses are identified in the *Course Schedule* (http://registrar.utexas.edu/schedules).
- 2. Social science
  - a. Psychology 301, which may also be counted toward the social and behavioral sciences requirement of the core curriculum.
- Mathematics: Mathematics 305G or calculus. Mathematics 305G and several calculus courses may also be counted toward the mathematics requirement of the core curriculum.
- 4. *Natural science*: Many courses that fulfill this natural science requirement may also be counted toward the science and technology requirements of the core curriculum.
  - a. Biology 301L and 309D, or 309D and 311C
  - b. Six hours of coursework in chemistry (304K and 305, or 301 and 302), physics (302K and 302L, or 309K and 309L, or 317K and 317L), or physical science (303 and 304).
  - c. Kinesiology 330E, Nutrition 306 or 312
- 5. Classical Civilization 306M
- 6. Foreign language: In addition to the Core Curriculum requirements above, undergraduates are expected to have completed two years in a single foreign language in high school. Students without two years of high school foreign language coursework must earn credit for the second college-level course in a foreign language; **this credit does not count toward the student's degree.** Students can consult with their adviser and the degree requirements to determine whether additional foreign language requirements apply to them.

### **Major Requirements**

- 1. The following courses:
  - a. Kinesiology 312 (Topic 2: Care and Prevention of Athletic Injuries)
  - b. Kinesiology 219K (Topic 3: Introduction to Athletic Training)
  - c. Kinesiology 424K, Applied Human Anatomy
  - d. Kinesiology 425K, Physiology of Exercise
  - e. Kinesiology 320, *Applied Biomechanics of Human Movement;* or Kinesiology 326K, *Biomechanical Analysis of Movement*
  - f. Kinesiology 341, Therapeutic Modalities in Athletic Training
  - g. Kinesiology 342, Clinical Evaluation of Athletic Injuries in the Lower Body
  - h. Kinesiology 343, Clinical Evaluation of Athletic Injuries in the Upper Body
  - i. Kinesiology 344, Therapeutic Exercise and Rehabilitation Techniques: Lower Body
  - j. Kinesiology 344U, *Therapeutic Exercise and Rehabilitation: Upper Body*
  - k. Kinesiology 345, General Medical Conditions in Athletic Training
  - I. Kinesiology 346, Athletic Training Program Administration
  - m. Kinesiology 363, Theory and Practice in Strength Coaching
  - n. Kinesiology 140S, Senior Seminar in Athletic Training
- 2. Students enrolled in the Athletic Training Program must complete a practicum course, determined by the faculty adviser, for each semester of their clinical rotations.

3. Nine hours of coursework in kinesiology, health education, or allied health profession prerequisites.

### Electives

Additional elective coursework may be required to provide the 120 semester hours required for the degree. Up to six hours of fieldwork may be counted toward the degree as electives. Up to three hours in physical education activity coursework (PED) may be counted as electives.

# Bachelor of Science in Kinesiology and Health

The field of kinesiology consists of biomechanical, physiological, psychological, managerial, epidemiological, rehabilitative, and sociocultural approaches to the study of human movement and personal and public health. The Bachelor of Science in Kinesiology and Health degree program offers five majors: applied movement science, exercise science, health promotion and behavioral science, physical culture and sports, and sport management.

The applied movement science program is designed for students interested in studying human movement as a background for helping others develop motor skills, physically active lifestyles and fitness. Students who successfully complete the physical education activity track can be recommended for teacher certification in physical education. The exercise science program is appropriate preparation for further study in sport and exercise sciences or in movementrelated areas such as physical therapy and sport medicine. The health promotion and behavioral science major is designed to prepare graduates for a number of professions including public health, community health promotion, university/college health services, government agencies, voluntary health agencies, corporate fitness and wellness, and healthcare centers. The sport management major is designed for students who are interested in the organization, marketing, and management of sport and/or entertainment programs. The physical culture and sports major is designed to prepare students for graduate school and/or careers related to a social science approach to sport and exercise.

The curriculum for the degree has four components: (a) the Universitywide Core Curriculum; (b) prescribed work for the Bachelor of Science in Kinesiology and Health; (c) major requirements, which include a minor or specialization; and (d) electives. More information, including a list of specializations and minors, is available from the College of Education Student Dean's Office, George I. Sánchez Building 216.

A total of at least 120 semester hours of coursework is required for the Bachelor of Science in Kinesiology and Health. For all majors, at least 36 hours must be in upper-division coursework.

## **Core Curriculum**

All students must complete the University's Core Curriculum. In the process of fulfilling the core curriculum and other degree requirements, all students are expected to complete the Skills and Experience flags (p. 23).

- 1. Writing: three flagged courses beyond Rhetoric and Writing 306 or its equivalent
- 2. Quantitative Reasoning: one flagged course
- 3. Global cultures: one flagged course
- 4. Cultural diversity in the United States: one flagged course
- 5. Ethics: one flagged course
- 6. Independent Inquiry: one flagged course

In some cases, a course that is required for the Bachelor of Science in Kinesiology and Health may also be counted toward the Core Curriculum; these courses are identified above. Courses used to fulfill flag requirements may also be used to fulfill other requirements.

### **Prescribed Work**

All students must complete the following requirements. Some majors require modifications to the prescribed work; these are described in the section for each major below.

- 1. *Writing:* Three courses with a writing flag. These courses are identified in the *Course Schedule* (http://registrar.utexas.edu/schedules).
- 2. Social science:

Psychology 301 and several social science courses that fulfill requirement b may also be counted toward the social and behavioral sciences requirement of the core curriculum.

- a. Psychology 301.
- b. Three hours of coursework in anthropology, economics, geography, linguistics, or sociology.
- 3. *Mathematics:* Three hours of coursework in mathematics. Several courses that fulfill this requirement may also be counted toward the mathematics requirement of the core curriculum.
- 4. Natural science:

Many courses that fulfill this natural science requirement may also be counted toward the science and technology requirements of the core curriculum.

- a. Biology 301L or 311C.
- b. Six hours of coursework in chemistry.
- c. Six additional hours chosen from astronomy, biology, chemistry, computer applications, computer science, geological sciences, mathematics, physical science, physics, experimental psychology, physical anthropology, physical geography, history of science, and philosophy of science.
- 5. In addition to the core curriculum requirements above, undergraduates are expected to have completed two years in a single foreign language in high school. Students without two years of high school foreign language coursework must earn credit for the beginning level proficiency in a foreign language; this credit does not count toward the student's degree. Students should consult their advisers to determine whether additional foreign language requirements apply to them. A list of acceptable substitute courses is available in the Student Dean's Office, George I. Sánchez Building 216.

### **Major Requirements**

All students seeking the Bachelor of Science in Kinesiology and Health must complete the following 12 semester-hour core, so that they are exposed to all aspects of the fields of kinesiology and health. Students will take three semester hours in Kinesiology 119 or physical education courses (the courses must require substantial physical activity) along with choosing three of the following courses.

- 1. Health Education 311
- 2. Kinesiology 310
- 3. Kinesiology 312M
- 4. Kinesiology 347

### **Applied Movement Science**

Applied movement science majors must complete the following:

- 1. The Prescribed Work (p. 159), with the following modifications:
  - To fulfill the mathematics requirement, Applied Movement Science majors must complete Mathematics 305G or calculus. Mathematics 305G and several calculus courses may also be counted toward the mathematics requirement of the core curriculum.
  - Applied movement science majors do not need to complete a course to fulfill the second part of the social science requirement (Prescribed Work 2b)
  - c. In fulfilling the natural science requirement, the student must complete the following:
    - i. In place of Biology 301L or 311C: Three hours in one of the fields of study that may be counted toward the science and technology, part II, requirement of the Core Curriculum.
    - ii. In place of six hours of chemistry: Six hours in one of the fields of study that may be counted toward the science and technology, part I, requirement of the Core Curriculum. The same field of study may not be used to fulfill both requirement i and requirement ii.
    - iii. Applied movement science majors do not need to complete the six additional hours of natural sciences (Prescribed Work 4c).
- 2. Twenty-five semester hours in the cognate in applied movement science:
  - a. Kinesiology 311K, Sport Psychology
  - b. Kinesiology 320
  - c. Kinesiology 424K
  - d. Kinesiology 335C
  - e. Kinesiology 352K, Sport Pedagogy
  - f. Kinesiology 321
  - g. Six hours of health education or kinesiology electives
- 3. Either a specialization in the Department of Kinesiology and Health Education, a minor outside the department, a certificate, or a track in a second field of study which consist of a minimum of 15 hours of coursework, six of which must be upper-division. No more than six hours in the minor may also be counted toward other degree requirements. Information about approved areas of study and specific courses that may be used is available in the Student Dean's Office, George I. Sánchez Building 216.

### **Exercise Science**

Students who plan to major in exercise science must apply for admission to the program. A student's grade point average and completion of prescribed prerequisite coursework are factors in the admission decision. Information about admission requirements is available from an academic adviser.

Exercise science majors must complete the following:

- 1. The Prescribed Work described above, with the following modifications:
  - a. To fulfill the mathematics requirement, exercise science majors must complete Mathematics 408C, 408K, or 408N. The calculus course may also be counted toward the mathematics requirement of the core curriculum.
  - b. To fulfill the natural science requirement, exercise science majors must complete Biology 311C, Chemistry 301 and 302, and Physics 302K and 102M. Chemistry may also be counted toward part I of the science and technology requirement of the Core Curriculum; Biology 311C or Physics 302K may also be counted toward part II of that requirement.
- 2. Twenty-three semester hours in the cognate in exercise science:

- a. Kinesiology 424K
- b. Kinesiology 425K
- c. Kinesiology 326K
- d. Three hours chosen from Kinesiology 321M, 335C, and 336
- e. Nine hours of exercise science electives; approved courses available in the Student Dean's Office, George I. Sánchez Building 216.
- 3. Either a specialization in the Department of Kinesiology and Health Education, a minor outside the department, a certificate, or a track in a second field of study which consist of a minimum of 15 hours of coursework, six of which must be upper-division. No more than six hours in the minor may also be counted toward other degree requirements. Information about approved areas of study and specific courses that may be used is available in the Student Dean's Office, George I. Sánchez Building 216.

### Health Promotion and Behavioral Science

Students who plan to major in health promotion and behavioral science must apply for admission to the

program. A student's grade point average and completion of prescribed prerequisite coursework are factors in the admission decision. Information about admission requirements is available from an academic adviser.

Health promotion and behavioral science majors must complete the following:

- 1. The Prescribed Work above, with the following modifications:
  - a. Health Promotion and Behavioral Science majors do not need to complete the six additional hours of natural sciences (Prescribed Work 4c).
  - b. Communication Studies 306M
- 2. Eighteen semester hours in the cognate in health promotion:
  - a. Health Education 343
  - b. Health Education 350
  - c. Health Education 351
  - d. Health Education 373
  - e. Six hours of health promotion and behavioral science electives; approved courses available in the Student Dean's Office, George I. Sánchez Building 216.
- 3. Either a specialization in the Department of Kinesiology and Health Education, a minor outside the department, a certificate, or a track in a second field of study which consist of a minimum of 15 hours of coursework, six of which must be upper-division. No more than six hours in the minor may also be counted toward other degree requirements. Information about approved areas of study and specific courses that may be used is available in the Student Dean's Office, George I. Sánchez Building 216.

### **Physical Culture and Sports**

Physical culture and sports majors must complete the following:

- 1. The Prescribed Work, with the following modification to the natural science requirement:
  - a. In place of Biology 301L or 311C: Three hours in one of the fields of study that may be counted toward the science and technology, part II, requirement of the Core Curriculum.
  - b. In place of six hours of coursework in chemistry: six hours in one of the fields of study that may be counted toward the science and technology, part I, requirement of the Core Curriculum. The same field of study may not be used to fulfill both requirement a and requirement b.

- In place of six additional hours of natural science (prescribed work requirement 4c): Three hours of coursework in computer applications.
- 2. Twenty-one semester hours in the cognate in physical culture and sports:
  - a. Kinesiology 349
  - b. Six semester hours chosen from Kinesiology 311K, 312 (Topic 4: Philosophy and Leadership in Sport and Physical Activity), 348, 350, 352K (Topic 5: Sport, Fitness, and Mass Media), 352K (Topic 6: Race and Sport in African-American Life), 355, 361, 362, and 363.
  - c. Three hours from Kinesiology 350 or Kinesiology 352K (Topic 6: Race and Sport in African-American Life), whichever is not used in 2b.
  - d. Kinesiology 351
  - e. Kinesiology 352K (Any topic)
  - f. Three semester hours of a kinesiology or health education elective.
- 3. Either a specialization in the Department of Kinesiology and Health Education, a minor outside the department, a certificate, or a track in a second field of study which consist of a minimum of 15 hours of coursework, six of which must be upper-division. No more than six hours in the minor may also be counted toward other degree requirements. Information about approved areas of study and specific courses that may be used is available in the Student Dean's Office, George I. Sánchez Building 216.

### Sport Management

Students who plan to major in sport management must apply for admission to the program. A student's grade point average, volunteer and work experiences, and completion of prescribed prerequisite coursework are factors in the admission decision. Information about admission requirements is available from an academic adviser.

Sport management majors must complete the following:

- The Prescribed Work described, with the following modifications:
   a. Sport management majors must complete an economics course
  - to fulfill the second part of the social science requirement. b. In fulfilling the natural science requirement, the student must
  - In fulfilling the natural science requirement, the student must complete the following:
    - i. In place of Biology 301L or 311C: Three hours in one of the fields of study that may be counted toward the science and technology, part II, requirement of the Core Curriculum.
    - ii. In place of six hours of chemistry: Six hours in one of the fields of study that may be counted toward the science and technology, part I, requirement of the Core Curriculum. The same field of study may not be used to fulfill both requirement i and requirement ii.
    - iii. In place of six additional hours of natural science (prescribed work 4c): Three hours in computer applications.
  - c. Communication Studies 306M.
- 2. Twenty-one semester hours in the cognate in sport management:
  - a. Kinesiology 312 (Topic 5: The Sport Industry in America)
  - b. Kinesiology 350 or Kinesiology 352K (Topic 6: Race and Sport in African-American Life)
  - c. Kinesiology 353
  - d. Kinesiology 354
  - e. Kinesiology 355
  - f. Kinesiology 356
  - g. Kinesiology 357

- 3. Kinesiology 628, or 328C and three semester hours of a kinesiology or health education elective.
- 4. Either a specialization in the Department of Kinesiology and Health Education, a minor outside the department, a certificate, or a track in a second field of study which consist of a minimum of 15 hours of coursework, six of which must be upper-division. No more than six hours in the minor may also be counted toward other degree requirements. Information about approved areas of study and specific courses that may be used is available in the Student Dean's Office, George I. Sánchez Building 216.

### Electives

Additional electives may be required to provide the total number of semester hours required for the student's major. No more than 12 semester hours of fieldwork and/or internship courses may be counted toward the degree.

# **Minor and Certificate Programs**

### Minor

The transcript-recognized undergraduate academic minor must be completed in conjunction with an undergraduate degree at The University of Texas at Austin. For more information regarding the requirements for achieving a minor, including a comprehensive list of minors, please visit the Minors and Certificate Programs (p. 13) section of the Undergraduate Catalog.

### **Educational Psychology Minor**

# Requirements Hours Completion of 15 undergraduate semester credit hours in educational psychology, six of which must be upper-division hours. Hours

15

15

#### Please Note:

Information about available courses and the certification process documenting completion of the minor is available from the Department of Educational Psychology, George I. Sanchez Building 504.

### **Kinesiology and Health Education Minor**

Requirements	Hours
A cumulative 2.5 The University of Texas at Austin GPA for admission	
Completion of 15 undergraduate semester credit hours in Kinesiology (KIN) or Health Education (HED), six of which must be upper-division hours.	
Please Note:	
Information about available courses and the partification	

Information about available courses and the certification process documenting completion of the minor is available from the Student Dean's Office, George I. Sanchez Building 216.

## Courses

The faculty has approval to offer the following courses in the academic years 2018 - 2019 and 2019 - 2020; however, not all courses are taught each semester or summer session. Students should consult the *Course Schedule* (http://registrar.utexas.edu/schedules) to determine which courses and topics will be offered during a particular semester or summer session. The *Course Schedule* (http://registrar.utexas.edu/

schedules) may also reflect changes made to the course inventory after the publication of this catalog.

A full explanation of course numbers is given in *General Information* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/credit-value-and-course-numbers). In brief, the first digit of a course number indicates the semester hour value of the course. The second and third digits indicate the rank of the course: if they are 01 through 19, the course is of lower-division rank; if 20 through 79, of upper-division rank; if 80 through 99, of graduate rank.

# Applied Learning and Development

### Applied Learning and Development: ALD

#### **Lower-Division Courses**

#### ALD 301C. Freshman Seminar.

Restricted to first-semester freshmen. Small-group seminar involving reading, discussion, writing, and oral reports. Introduction to University resources, including libraries, computer and research facilities, and museums. Several sections are offered each semester, with various topics and instructors. Two lecture hours and one discussion hour a week for one semester.

#### ALD 301D. Connecting Research Experience.

Restricted to freshmen and sophomores. Supervised research associated with the Connexus Bridging Disciplines Program. The equivalent of three lecture hours a week for one semester. With consent of the Connexus Bridging Disciplines Program, may be repeated for credit. Prerequisite: Admission to the Connexus Bridging Disciplines Program.

#### ALD 118C, 218C, 318C. Forum Seminar Series.

Restricted to freshmen and sophomores. Lectures and discussions on various contemporary issues. Emphasis on multidisciplinary perspectives and critical discourse. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May be repeated for credit when the topics vary.

# ALD 119, 219, 319, 419, 519, 619. International Learning Seminars.

Discussion of various issues related to the academic, cultural, and personal aspects of completing academic work in international locations. For each semester hour of credit earned, one lecture hour a week for one semester. Applied Learning and Development 119, 219, 319, 419, 519, 619 and Undergraduate Studies 119 may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

#### **Upper-Division Courses**

#### ALD 320. Cognition, Human Learning, and Motivation.

Current and classical theories concerning conditioning paradigms, learning and remembering, attention, knowledge representation and retrieval, comprehension and production of language, problem solving, and the ways emotion influences learning. Three lecture hours a week for one semester. Prerequisite: Three semester hours of coursework in psychology.

#### ALD 320C. Connecting Research Experience.

Supervised research associated with the Connexus Bridging Disciplines Program. The equivalent of three lecture hours a week for one semester. With consent of the Connexus Bridging Disciplines Program, may be repeated for credit. Prerequisite: Upper-division standing and admission to the Connexus Bridging Disciplines Program.

#### ALD 321. Play in Early Childhood Development.

Theoretical and empirical bases for observing children in play; cognitive, social, and communicative stages related to developmental theory; children's adjustment related to social and emotional theories; motivational value of play. Three lecture hours a week for one semester, with field hours to be arranged. Prerequisite: Three semester hours of coursework in psychology.

#### ALD 322. Individual Differences.

Introduction to individual differences among people through the life span. Examines areas of exceptionality within the context of typical development: current research trends; theoretical and legal considerations; and practice-related issues, including family involvement, cultural and linguistic diversity, and educational perspectives. Orientation to assistive technology. Three lecture hours a week for one semester, with field hours to be arranged. Prerequisite: Three semester hours of coursework in psychology.

#### ALD 323. Language Acquisition.

Language structure; sequence, process, cognitive and social aspects of language acquisition and use; language variation. Three lecture hours a week for one semester. Required for certification in early childhood education. Prerequisite: Three semester hours of coursework in psychology.

#### ALD 324. Literacy Acquisition.

Processes of becoming literate; cognitive insights that move a child to literacy; relationships between reading and writing and among individual characteristics, social factors, and literacy growth. Three lecture hours a week for one semester. This course or Psychology 338K is required for the reading specialization. Prerequisite: Three semester hours of coursework in psychology.

#### ALD 325. Second Language Acquisition.

Acquisition by children or adults of English as a second language. Simultaneous acquisition of two languages, adding a second language, language processing, order of acquisition, role of the first language. Three lecture hours a week for one semester, with field hours to be arranged. Required for certification in bilingual education. Applied Learning and Development 325 and 329 may not both be counted. Prerequisite: Three semester hours of coursework in psychology.

#### ALD 326. Language of Children with and without Disabilities.

Restricted to special education majors. Physiological, prelinguistic, and linguistic components of language; theoretical framework of communication and language development in monolingual and bilingual populations; problems of language development in special populations; language assessment tools. Technological skills component. Three lecture hours a week for one semester. Required for certification in generic special education.

#### ALD 327. Sociocultural Influences on Learning.

Human learning in multisocial, multilingual, and multicultural contexts; realities of society and their impact on learning; social concerns such as prejudice, stereotyping, cross-cultural attitudes, bilingual issues, parent and community involvement. Three lecture hours a week for one semester, with field hours to be arranged. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: Sociocultural Influences on Learning), 372D (Topic 2), Applied and Learning Development 327. Prerequisite: Three semester hours of coursework in psychology.

#### ALD 327G. Study Abroad: Education, Culture and Diversity.

Comparative analysis of human learning in multisocial, multilingual, and multicultural contexts in the United States and Latin America. Social concerns such as prejudice, stereotyping, cross-cultural attitudes, bilingual issues, and parent and community involvement. Particular focus on transnationalism and immigration in the United States from Central America and Mexico. The equivalent of three lecture hours a week for one semester. Taught in Latin America.

#### ALD 328. Applied Human Learning.

Development, cognition, language, and sociocultural influences in learning contexts; child assessment, identification of learning styles, and tests and measurements. Fieldwork to provide a theoretical basis for professional assessment, referral, and placement. Three lecture hours a week for one semester, with fieldwork to be arranged. Prerequisite: Admission to the professional development sequence of the Bachelor of Science in Applied Learning and Development degree program.

#### ALD 329. Acquisition of Language and Literacies.

Subjects include initial language and literacy acquisition theory; second language acquisition theory; relations among first and additional languages in literacy and language acquisition; home, school, and learners' perspectives; and current issues in literacy and multilingual classrooms. Three lecture hours a week for one semester. Additional fieldwork hours may be required. Applied Learning and Development 325 and 329 may not both be counted. Required for students seeking certification in early childhood through grade six generalist. Prerequisite: Applied Learning and Development 327.

# ALD 329G. Study Abroad: Acquisition of Language and Literacies in the United States and Latin America.

Exploration of the theory and practice of language acquisition in crosscultural contexts in Latin America and the United States. Subjects include the instruction of English as a second language, social justice for bilingual learners and speakers of minority languages, and connections to multilingual communities. Particular focus on language and immigration issues in the United States and Latin America. The equivalent of three lecture hours a week for one semester. Taught in Latin America.

#### ALD 330. Language in Education.

Theoretical and practical perspectives on the nature of language in education, with a focus on implications for English language learners in classroom settings; linguistic structures and functions; discourse, phonology, morphology, syntax, and semantics across languages and throughout development; and language varieties. Three lecture hours a week for one semester. Additional fieldwork hours may be required. Prerequisite: Three semester hours of coursework in psychology.

#### ALD 331. Restorative Practices.

Focus on community engagement and social justice issues related to schooling access and equity. Includes a field based component that promotes practices needed to implement restorative practices in multiple settings. Three lecture hours per week. Offered on the lettergrade basis only. Prerequisite: Upper-division standing.

#### ALD 333. Children's Literature.

For future teachers, an investigation of literature written for children from early childhood through age twelve. Includes an investigation of genres, authors, themes, and forms, and an introduction to ways of bringing literature to children, facilitated by extensive discussion. Three lecture hours a week for one semester, with field hours to be arranged.

# ALD 179, 279, 379, 479, 579, 679. International Learning Seminars.

Discussion of various issues related to the academic, cultural, and personal aspects of completing academic work in international locations. For each semester hour of credit earned, one lecture hour a week for one semester. Applied Learning and Development 179, 279, 379, 479, 579, 679 and Undergraduate Studies 119 may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: Upperdivision standing.

# Department of Curriculum and Instruction

Admission to the Professional Development Sequence of upper-division courses for teacher certification requires formal acceptance. Information about admission requirements is available from the Office of the Dean, George I. Sánchez Building 216.

### **Curriculum and Instruction: EDC**

#### **Lower-Division Courses**

#### EDC 101E. Orientation to Teaching in the Elementary School.

Open to all University students. Discussion sessions and assignments in public schools; designed to help students make teaching career decisions. One discussion hour and three hours of fieldwork a week for one semester. May be repeated for credit.

#### EDC 101S. Orientation to Teaching in the Secondary School.

Open to all University students. Discussion sessions and assignments in public schools; designed to help students make teaching career decisions. One discussion hour and three hours of fieldwork a week for one semester. May be repeated for credit.

# EDC 319. Qualitative Inquiry and Education for Social Change.

Examines the socio-historical contexts of education for minoritized groups in the U.S. through empirical approach of critical qualitative inquiry in education. Explores qualitative and historical studies in which students, teachers, administrators, and parents seek to change or reform their educational experiences. Entails research in schools and nonschool settings. Three lecture hours a week for one semester.

#### **Upper-Division Courses**

# EDC 331E. School Organization and Classroom Management in Elementary Schools.

Administrative structure of elementary schools; concepts, principles, and strategies for establishing an orderly classroom environment, preventing inappropriate behavior, and promoting student involvement in academic work. Three lecture hours a week for one semester, and sixteen to twenty hours of fieldwork a week in an elementary school. Communication Sciences and Disorders 331E and Curriculum and Instruction 331E may not both be counted. Prerequisite: Admission to the professional development sequence of courses, completion of seventy-two semester hours of coursework, and a University grade point average of at least 2.50.

# EDC 331S. School Organization and Classroom Management in Secondary Schools.

Administrative structure of secondary schools; concepts, principles, and strategies for establishing an orderly classroom environment, preventing inappropriate behavior, and promoting student involvement in academic work. Three lecture hours a week for one semester, with at least sixty hours of fieldwork in a secondary school. Prerequisite: Admission to the professional development sequence of courses, completion of seventy-two semester hours of coursework, and a University grade point average of at least 2.50.

#### EDC 332S. Designs for Instruction.

One of the beginning courses in the professional development sequence for approved programs in secondary education. Three lecture hours a week for one semester, with a single seven-hour media competency evaluation to be arranged. Prerequisite: Admission to the professional development sequence of courses, completion of seventy-two semester hours of coursework, a University grade point average of at least 2.50, and concurrent enrollment in Curriculum and Instruction 331S.

#### EDC 333W. Introduction to Teaching.

Open to all upper-division students. Overview of the objectives, organization, and operation of schools; the teaching process; teaching as a professional career. Two lecture hours and two hours of fieldwork a week for one semester. Prerequisite: Upper-division standing.

#### EDC 339C. Community Literacy.

Three lecture hours a week for one semester. Prerequisite: Admission to the professional development sequence of courses.

#### EDC 339D. Reading Assessment and Development.

Three lecture hours a week for one semester. Prerequisite: Admission to the professional development sequence of courses.

# EDC 339E. Secondary School Literacy across the Disciplines.

Designed for students in a University secondary teacher preparation program. Three lecture hours a week for one semester.

#### EDC 339F. Adolescent Literacy.

Designed for students in a University secondary teacher preparation program. Social, political, cultural, emotional, and personal perspectives on adolescent literacy. Subjects may include adolescent literacy practices in and out of school; literacy in relation to identity, peer communities, meaning, communication, and social engagement; curricula that emphasize the social and civic purposes of literacy; and motivation, fulfillment, and democratic participation as educational outcomes. Three lecture hours a week for one semester.

#### EDC 339G. Literacy Seminar.

Three lecture hours a week for one semester. Prerequisite: Admission to the professional development sequence of courses.

# EDC 340C. Spanish Language Methods for the Bilingual Classroom Teacher I.

Restricted to bilingual generalist certification students. Designed primarily to help prospective bilingual education teachers expand their oral Spanish proficiency for instructional purposes in the bilingual education classroom. Three lecture hours a week for one semester, with field hours to be arranged. Prerequisite: Credit or registration for Spanish 611D or 312L.

# EDC 340D. Spanish Language Methods for the Bilingual Classroom Teacher II.

Restricted to bilingual generalist certification students. Intensive practice in the various aspects and conventions governing literacy within the elementary bilingual education curriculum. Three lecture hours a week for one semester, with field hours to be arranged. Prerequisite: Curriculum and Instruction 340C, Spanish 611D or 312L, and admission to the professional development sequence of courses.

# EDC 340E. Latino Children's Literature for Bilingual Teachers.

Restricted to students seeking certification in bilingual generalist. Covers the use of oral and written literature for children in bilingual programs while examining the history and development of Spanish-language children's literature from social, cultural, and political perspectives. Subjects may include foundational books, authors, and illustrators of Latina/o children's literature; criteria for evaluating culturally authentic children's literature; multimedia and online resources related to bilingual children's literature; and the literary response process. Three lecture hours a week for one semester, with field hours to be arranged. Prerequisite: Knowledge of Spanish and completion of at least thirty-six semester hours of coursework.

#### EDC 340F. Foundations of Bilingual Education.

Restricted to bilingual generalist certification students. An overview of theory, practice, programs, and policy related to bilingual education as implemented in the United States. Designed to give students an opportunity to learn about and discuss issues related to bilingual education, and the education of linguistically and culturally diverse populations. Three lecture hours a week for one semester, with field hours to be arranged.

#### EDC 341C. Early Childhood Education.

Introductory exploration of historical antecedents and social and educational issues in early childhood education; analysis of curricula and behavioral practices in early childhood education; and development of sensitivity to particular needs of early childhood populations. Three lecture hours a week for one semester.

#### EDC 341D. Early Childhood Program Development.

Preparation for developing appropriate curricula for early childhood education classrooms, including the contexts of curriculum decision making (community, state, culture, and politics); developmentallyappropriate practice and classroom environments; bases for selecting materials; and frameworks for reflecting on decisions. Three lecture hours a week for one semester.

#### EDC 343. Informal Science Education.

Three lecture hours and one three-hour field laboratory a week for one semester, with one four-hour Saturday field trip to be arranged. Prerequisite: Upper-division standing, six semester hours of coursework in science, or consent of instructor.

#### EDC 344. Digital Literacy for Teaching and Learning.

Use of digital tools to increase technical, pedagogical, and administrative proficiencies in a series of hands-on laboratory projects involving word-processing, handling of databases and spreadsheets, multimedia presentations, digital image and video editing, web page creation, and tools to create digital storytelling, e-portfolios, and electronic gradebooks. Experiential foundation creates a repertoire of possibilities for content-specific, technology-supported teaching and learning associated with learner-centered, collaborative classrooms. Emphasis on the development of critical perspectives (including pedagogical, social, technical, cultural, ethical, economic, legal, and political) to help youth fully participate in digital learning. Three lecture hours a week for one semester.

#### EDC 345. Curriculum Issues in Physical Education.

Study of personal teaching and physical education programs. Accompanies student teaching. Three lecture hours a week for one semester. Prerequisite: A major in applied movement science, admission to the professional development sequence of courses, and concurrent enrollment in Curriculum and Instruction 950W.

#### EDC 350. Topics in Educational Studies.

Analysis of selected topics and problems in education. Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

# EDC 350E, 650E, 950E. Elementary Grade Teaching Practicum.

Supervised practicum in early childhood through grade four classroom teaching, conducted in cooperating schools, as part of the teacher preparation program. Consists of teaching, analysis, and evaluation. Two lecture hours and at least fifteen, thirty, or forty-five hours of fieldwork a week for one semester. Offered on the pass/fail basis only. Prerequisite: Admission to the teacher preparation program and consent of the Office of Student Field Experiences.

# EDC 351S, 651S, 951S. Secondary School Teaching Practicum.

Supervised practicum in secondary classroom teaching, conducted in cooperating schools, as part of the teacher preparation program. Consists of teaching, analysis, and evaluation. For each semester hour of credit earned, one lecture hour a week for one semester, with additional hours to be arranged. No more than nine semester hours of this course may be taken for credit. May be repeated for credit when the topics vary. Offered on the pass/fail basis only. Prerequisite: Admission to the teacher preparation program and consent of the Office of Student Field Experiences.

**Topic 1: Secondary School Teaching Practicum: English.** Restricted to students seeking secondary teaching certification in English. Offered on the pass/fail basis only.

**Topic 2: Secondary School Teaching Practicum: Social Studies.** Offered on the pass/fail basis only.

**Topic 3: Secondary School Teaching Practicum: Math.** Offered on the pass/fail basis only.

**Topic 4: Secondary School Teaching Practicum: Science.** Offered on the pass/fail basis only.

#### EDC 351W, 651W, 951W. All Level Teaching Practicum.

Supervised practicum in elementary, middle school, and secondary classroom teaching. Conducted in cooperating schools as part of the teacher preparation program. Consists of teaching, analysis, and evaluation. For each semester hour of credit earned, one lecture hour a week for one semester, with additional hours to be arranged. May be repeated for credit when the topics vary. Offered on the pass/fail basis only. Prerequisite: Admission to the teacher preparation program and consent of the Office of Student Field Experiences.

**Topic 1: All Level Teaching Practicum: Theatre.** Offered on the pass/ fail basis only.

Topic 2: All Level Teaching Practicum: Visual Art. Offered on the pass/ fail basis only.

Topic 3: All Level Teaching Practicum: Dance. Offered on the pass/fail basis only.

**Topic 4: All Level Teaching Practicum: Music.** Offered on the pass/fail basis only.

**Topic 5: All Level Teaching Practicum: Kinesiology.** Offered on the pass/fail basis only.

# EDC 352S, 652S, 952S. Secondary Student Teaching Methods.

Focus on secondary teaching, and addressing instructional design and assessment. For each semester hour of credit earned, one lecture hour a week for one semester. No more than nine semester hours of this course may be taken for credit. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

#### EDC 364, 664. Internship.

Supervised fieldwork or clinical work in the student's area of study. For 364, at least one conference hour and ten hours of fieldwork a week for one semester; for 664, at least one conference hour and twenty hours of fieldwork a week for one semester. Communication Sciences and Disorders 364 and Curriculum and Instruction 364, 664 may not both be counted. Offered on the pass/fail basis only. Prerequisite: Consent of instructor.

# EDC 665. Classroom Interactions and Project Based Instruction.

Restricted to students admitted to the UTeach Natural Sciences postbaccalaureate program. Students are assigned to a mentor teacher classroom where they might continue as apprentice teachers the next semester. Students will be observing or teaching in the classroom at least 3 hours a week, in addition to the 6 contact hours per week. Students prepare, implement and analyze results of inquiry- and projectbased lessons, focusing on student thinking and participation, and meeting the needs of students with reading and writing difficulties, those learning in a second language, and those with behavioral and psychological issues. Six lecture hours a week for one semester, with three additional fieldwork hours to be arranged. Curriculum and Instruction 665 and Science, Technology, Engineering, and Mathematics Education 695 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Curriculum and Instruction 365C or Science, Technology, Engineering, and Mathematics Education 385.

#### EDC 365C. Knowing and Learning in Math and Science.

Same as UTeach-Natural Sciences 350. Restricted to students in the UTeach-Natural Sciences program. Psychological foundations of learning; problem solving in mathematics and science education utilizing technology; principles of expertise and novice understanding of subject matter; implications of high-stakes testing; and foundations of formative and summative assessment. Three lecture hours a week for one semester; additional hours may be required. Curriculum and Instruction 365C and UTeach-Natural Sciences 350 may not both be counted. Prerequisite: Credit with a grade of at least C- or registration for UTeach-Natural Sciences 101.

#### EDC 365D. Classroom Interactions.

Same as UTeach-Natural Sciences 355. Restricted to students in the UTeach-Natural Sciences program. Principles of delivering effective instruction in various formats (lecture, lab activity, collaborative settings); examination of gender, class, race, and culture in mathematics and science education; overview of policy related to mathematics and science education. Three lecture hours a week for one semester; additional hours may be required. Curriculum and Instruction 365D and UTeach-Natural Sciences 355 may not both be counted. Prerequisite: The following courses with a grade of at least C-: Curriculum and Instruction 365C or UTeach-Natural Sciences 350, and UTeach-Natural Sciences 110; and a University grade point average of at least 2.50.

#### EDC 365E. Project-Based Instruction.

Same as UTeach-Natural Sciences 360. Restricted to students in the UTeach-Natural Sciences program who have earned a passing score on the preliminary portfolio. Foundations of project-based, casebased, and problem-based learning environments; principles of projectbased curriculum development in mathematics and science education; classroom management and organization of project-based learning classrooms. Three lecture hours a week for one semester with additional fieldwork hours to be arranged. Curriculum and Instruction 365E and UTeach-Natural Sciences 360 may not both be counted. Prerequisite: Curriculum and Instruction 365D or UTeach-Natural Sciences 355 with a grade of at least C-, and a University grade point average of at least 2.50.

#### EDC 370E. Elementary School Subjects.

Curriculum content and organization, teaching procedures, materials, and research in elementary school subjects. Three lecture hours a week for one semester, including field hours in elementary schools. May be repeated for credit when the topics vary. Prerequisite: A University grade point average of at least 2.50.

**Topic 1: Reading.** Additional prerequisite: Admission to the professional development sequence of courses.

**Topic 2: Language Arts.** Additional prerequisite: Admission to the professional development sequence of courses.

Topic 3: Science. Additional prerequisite: Admission to the

professional development sequence of courses.

**Topic 4: Social Studies.** Additional prerequisite: Admission to the professional development sequence of courses.

**Topic 5: Mathematics.** Additional prerequisite: Mathematics 316L or consent of the mathematics education faculty; and admission to the professional development sequence of courses.

Topic 15: Special Adaptations for the Deaf.

**Topic 19: Reading/Language Arts.** Additional prerequisite: Admission to the professional development sequence of courses.

**Topic 20: Teaching English as a Second Language.** The methods, teaching strategies, and materials for developing and assessing English language proficiency in culturally and linguistically diverse populations within the context of the elementary school curriculum. **Topic 21: Teaching Elementary Physical Education.** 

#### EDC 370S. Secondary School Subjects.

Curriculum content and organization, teaching procedures, materials, and research in one secondary school subject. Three lecture hours a week for one semester. The topic in the appropriate field is required for secondary school teacher certification. May be repeated for credit when the topics vary. Prerequisite: Admission to the professional development sequence of courses, completion of ninety semester hours of coursework, and six semester hours of upper-division coursework in the appropriate subject; additional prerequisites vary with the topic.

**Topic 1: Advanced Methods in English, Language Arts, and Reading.** Restricted to students in a secondary teacher preparation program in the Department of Curriculum and Instruction.

**Topic 3: Advanced Methods in Social Studies.** Restricted to students in a secondary teacher preparation program in the department of Curriculum and Instruction.

**Topic 5: Advanced Methods in Foreign Language.** Restricted to students in a secondary teacher preparation program in the Department of Curriculum and Instruction.

**Topic 7: Art.** Additional prerequisite: Curriculum and Instruction 331S and 332S.

**Topic 8: Music (Vocal).** Additional prerequisite: Curriculum and Instruction 331S and 332S.

**Topic 9: Music (Instrumental).** Additional prerequisite: Curriculum and Instruction 331S and 332S.

**Topic 10: Drama.** Additional prerequisite: Curriculum and Instruction 331S and 332S.

Topic 11: Speech. Additional prerequisite: Consent of instructor. Topic 12: Teaching Secondary Physical Education.

#### EDC 370W. All-Level School Subjects.

Curriculum content and organization; teaching procedures, materials, and research in one school subject at all grade levels. Three lecture hours a week for one semester. The topic in the appropriate field is required for all-level school teacher certification. May be repeated for credit when the topics vary. Prerequisite: Admission to the professional development sequence of courses.

Topic 1: English as a Second Language.

Topic 2: Art. Topic 3: Music. Topic 4: Theatre. Topic 5: Foreign Language Education.

#### EDC 371G. Teaching Young Children.

Designed to provide students with frameworks for observing and interacting with young children in classroom settings, and to acquaint students with the teacher's varied roles in early childhood classrooms. Topics include cultural and linguistic diversity; supervising and interacting with children in a range of instructional groupings, including center-based and play-based learning activities and whole-group experiences; planning and implementing appropriate practices and strategies; and record-keeping and assessment. Three lecture hours a week for one semester, and twelve to sixteen hours of fieldwork a week in a public school. Prerequisite: Upper-division standing, twelve semester hours of upper-division coursework in education, or consent of the education adviser; and admission to the professional development sequence of courses and a University grade point average of at least 2.50.

#### EDC 371R. Reading Difficulties.

Reading theory, assessment, materials, and instruction with emphasis on struggling readers; field experiences in reading tutoring. Three lecture hours a week for one semester with additional field hours to be arranged. Prerequisite: Upper-division standing, twelve semester hours of upperdivision coursework in education, or consent of the education adviser; and admission to the professional development sequence of courses and a University grade point average of at least 2.50.

#### EDC 373. African Americans in Sports.

Same as African and African Diaspora Studies 374D (Topic 12). Theoretical and practical complexities in issues surrounding African Americans in sports, including the relationship between athletics and higher education. Focuses on racial stereotyping, identity theory, and how practical knowledge of these theories can aid in understanding the current state of athletics. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: African Americans in Sports), 374D (Topic 12), Curriculum and Instruction 373.

#### EDC 377. Conference Course in Curriculum and Instruction.

Independent studies in instructional methodology and curriculum. Conference course. May be repeated for credit. Prerequisite: Upperdivision standing and consent of instructor.

# Department of Educational Psychology

### **Educational Psychology: EDP**

#### **Lower-Division Courses**

#### EDP 304. Strategic Learning for the Twenty-First Century.

Explores a wide range of subjects in educational psychology that impact student learning, including theories of cognition and motivation, and applies them to academic work. Covers strategies to improve student academic performance. Three lecture hours a week for one semester. Only one of the following may be counted: Educational Psychology 304; 110, 210, 310 (Topic 1); 110, 210, 310 (Topic 4); 110, 210, 310 (Topic 5). Offered on the letter-grade basis only.

#### EDP 308. Statistical Reasoning and Literacy.

Introduction to statistical applications and their interpretation in daily life. Covers principles of gathering and analyzing data, and interpreting

analysis results in order to critically evaluate findings reported in the media and social science research. Explores basic statistical analyses, and skills needed for informed research consumerism. Three lecture hours a week for one semester.

#### EDP 216, 316, 416. Intergroup Dialogue.

Group discussion of the definitions and implications of social identities. Topics may include gender, race, ethnicity, religion, sexual orientation, physical ability, and age. For each semester hour of credit earned, one lecture hour a week for one semester. Only one of the following may be counted: Educational Psychology 210 (Topic: Intergroup Dialogue), 210 (Topic 3), 310 (Topic 3), and 216, 316, 416. Offered on the letter-grade basis only.

# EDP 118T, 218T, 318T, 418T. Selected Topics in Educational Psychology.

Issues, research, and topics of contemporary interest in various areas of educational psychology and the behavioral sciences that may vary from semester to semester. For each semester hour of credit earned, one lecture hour a week for one semester; additional laboratory hours may be arranged for some topics. May be repeated for credit when the topics vary.

**Topic 4: Myths and Mysteries of Memory.** Educational Psychology 312 (Topic 4: Myths and Mysteries of Memory) and 118T, 218T, 318T, 418T (Topic 4) may not both be counted.

**Topic 5: Introduction to Career Planning.** Introduction to social science models of career development and perspectives of work as a culturally-mediated artifact of human society. Discussion of how social scientists use data about individual characteristics and jobs to help people optimize career choices. Group and individual project-based assessments will provide opportunities to apply learned concepts to students's own career planning.

#### **Upper-Division Courses**

#### EDP 350E. Introduction to Life Span Development.

Explores theories of personality, as well as research and literature on mental health and character development, applying principles and theories to the educative enterprise. Covers application of personality theory to the guidance of children and youth. Study of physical, social, and cognitive development in humans. Three lecture hours a week for one semester. Only one of the following may be counted: Educational Psychology 350E, 363M (Topic: Introduction to Life Span Development), and 363M (Topic 6). Prerequisite: Upper-division standing recommended.

#### EDP 350G. Adolescent Development.

Addresses contemporary adolescent development in relation to major transitions, contextual influences, and psychosocial tasks. Covers adolescent identity development, with focus on the education of adolescents. Three lecture hours a week for one semester. Only one of the following may be counted: Educational Psychology 350G, 363M (Topic: Adolescent Development), 363M (Topic 3). Prerequisite: Upper-division standing and six semester hours of upper-division coursework in education or behavioral sciences.

#### EDP 350L. Human Sexuality.

Taught from a psychological perspective with attention to the physiological, emotional, and relationship dimensions of sexuality. Presents factual information and promotes scholarly examination of social and personal factors in developing healthy relationships and sexual expression. Three lecture hours a week for one semester. Educational Psychology 350L and 363 (Topic 3) may not both be counted. Prerequisite: Upper-division standing.

# EDP 352D. Introduction to Individual Counseling and Psychotherapy.

Nature of the counseling process, dynamics of behavior change, clientcounselor roles and relationships; an experiencing of the group process as a basis for studying dynamics of individual and group behavior. Three lecture hours a week for one semester. Educational Psychology 352D and 367 (Topic 1) may not both be counted. Prerequisite: Upper-division standing.

# EDP 352G. Multicultural Approach to Counseling and Psychotherapy.

An introduction to cultural diversity, cultural issues, cultural groups, and multiculturalism in counseling. Three lecture hours a week for one semester. Educational Psychology 352G and 367 (Topic 2) may not both be counted. Prerequisite: Upper-division standing and completion of six semester hours of upper-division coursework in behavioral sciences.

#### EDP 352K. Mindfulness, Compassion, and the Self.

Subjects include mindfulness, self-compassion, well-being, and selfconcept. Three lecture hours a week for one semester. Only one of the following may be counted: Educational Psychology 352K, 362 (Topic 8), and 362 (Topic: Mindfulness, Compassion, and the Self). Prerequisite: Upper-division standing and completion of three semester hours of coursework in behavioral sciences.

#### EDP 352N. Addiction Counseling and Theories.

Studies in biological mechanisms of categories of commonly abused substances and behaviors, as well as prevention and treatment approaches to addiction. Includes discussion of other forms of addiction, including food, sex, and internet, and addiction in diverse populations. Three lecture hours a week for one semester. Educational Psychology 352N and 367 (Topic 3) may not both be counted. Prerequisite: Upperdivision standing and completion of six semester hours of upper-division coursework in behavioral sciences.

#### EDP 354E. Psychology of Women.

Study of women's experiences, issues, and behavior in the context of psychological theory and research. Integrates several sub-disciplines of psychology, including physiological, personality, developmental, social, abnormal, and applied psychology. Explores a variety of topics relevant to psychology of women, including theories of women's personality, gender socialization, sex differences, victimization, oppression, and motherhood. Three lecture hours a week for one semester. Only one of the following may be counted: Educational Psychology 354E, 362 (Topic: Psychology of Women), 362 (Topic 10), and Women's and Gender Studies 345 (Topic: Psychology of Women). Prerequisite: Upper-division standing.

#### EDP 354G. Psychology of the African American Experience.

Same as African and African Diaspora Studies 374D (Topic 11). Examination of the psychology of people of African descent using an African-centered liberatory model. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: Psychology of the African-American Experience), 374D (Topic 11), Educational Psychology 354G, 362 (Topic: Psychology of the African-American Experience), 362 (Topic 9: Psychology of the African-American Experience).

#### EDP 354J. Psychology of Race and Racism.

Same as African and African Diaspora Studies 372D (Topic 1). Review of the history and evolution of the construct of race as a psychological and social phenomenon. Multidisciplinary but primarily social-psychological approach: in addition to readings from psychology, ideas in the areas of anthropology, sociology, and biology will be discussed. Emphasis on theoretical and conceptual approaches toward understanding the psychology of racial thinking. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 372D (Topic 1), 374D (Topic: Psychology of Race and Racism), Educational Psychology 354J, 362 (Topic 6: Psychology of Race and Racism), 362 (Topic: Psychology of Race and Racism). Prerequisite: Upper-division standing.

#### EDP 354L. Community Leadership on the College Campus.

Issues and topics of interest in various areas of college leadership. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Additional prerequisites may vary with the topics.

#### EDP 358D. Emotional and Behavioral Disorders.

Covers theory and research on several mental disorders with a critical perspective on how social structures and assumptions influence the way they are conceptualized and treated. Three lecture hours a week for one semester. Educational Psychology 358D and 363 (Topic 5) may not both be counted. Prerequisite: Upper-division standing and completion of three semester hours of coursework in behavioral sciences.

#### EDP 358F. Educational Neuroscience.

Explores the interactions between neurobiological processes and education, examining how cognitive neuroscience can inform and guide educational practice, as well as how the impact of the educational experience on brain development and functioning can increase understanding of functional neural systems. Three lecture hours a week for one semester, additional laboratory hours may be arranged. Only one of the following may be counted: Educational Psychology 358F, 369K (Topic: Educational Neuroscience), and 369K, 469K (Topic 10). Prerequisite: Upper-division standing and completion of six semester hours of upper-division coursework in behavioral sciences.

#### EDP 371. Introduction to Statistics.

Measures of central tendency and variability; correlation and regression; probability and statistical inference; analysis of variance; nonparametric statistics. Three lecture hours a week for one semester, with additional laboratory hours to be arranged. Only one of the following may be counted: Educational Psychology 371, Mathematics 316, Statistics 309 or Statistics and Data Sciences 301. A student may not earn credit for Educational Psychology 371, Mathematics 316, Statistics 309 or Statistics and Data Sciences 301 after having received credit for any of the following with a grade of at least C-: Statistics and Data Sciences 302, 303, 304, 305, 306, or 328M.

# EDP 176T, 276T, 376T, 476T. Topics in Educational Psychology.

Issues, research, and topics of contemporary interest in various areas of educational psychology and the behavioral sciences. For each semester hour of credit earned, one lecture hour a week for one semester; additional laboratory hours may be arranged for some topics. May be repeated for credit when the topics vary. Prerequisite: Prerequisites may vary with the topic.

**Topic 3: Disability and Culture in Education.** Examination of the culture of disability in the educational context. Explores language and terminology around disability; history of ableism (discrimination/ prejudice), the role of accommodations and access in defining disability and inclusion, perceptions of disability over time, identity development for individuals with a disability, diversity and difference of language within disability groups.

**Topic 5: Documentary Film and Inquiry: Honors.** Focus on student creation of short video documentaries on their chosen topics. Documentary projects will also be the vehicle for exploring

methodological issues in relation to qualitative methods and the use of media as a tool. Covers elements that make documentaries effective as a means for communicating ideas and issues. Educational Psychology 376T (Topic 5) and 369K (Topic: Documentary Film & Inquiry) may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 7: Pediatric Psychology.** Explanation of biological, psychological, and social foundations of pediatric conditions, as well as lifespan health conditions related to development in childhood. Explores pediatric health disparities, the intersection of psychology and public health, research methods used in the field of pediatric psychology, and assessment and intervention with children and families. Additional prerequisite: Upper-division standing; six semester credit hours of coursework in behavioral sciences; consent of instructor.

#### EDP 379L. Research in Educational Psychology.

Supervised research experience in educational psychology. Individual Instruction. May be repeated for credit. Prerequisite: Upper-division standing, completion of twelve semester hours of upper-division coursework in behavioral sciences, and consent of instructor.

# Department of Kinesiology and Health Education

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

### **Health Education: HED**

#### **Lower-Division Courses**

#### HED 110. Freshman seminar.

Provides an overview of the life skills that are critical to success, such as academic, social, and health behaviors. Offered on the pass/fail basis only.

# HED 311. Introduction to Health Promotion and Behavioral Science.

Restricted to health education and kinesiology majors. Provides an introduction to the concepts and core principles of health promotion and behavioral science. Three lecture hours a week for one semester. Offered on the letter-grade basis only.

#### HED 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Health Education.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Kinesiology and Health Education. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### **Upper-Division Courses**

#### HED 127L, 227L, 327L, 627L. Fieldwork in Health Promotion.

Restricted to health education and kinesiology majors. Applied experiences in development, delivery, or evaluation of professional health promotion programs. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester, with additional hours to be arranged. No more than twelve semester hours in the following courses may be counted: Health Education 127L, 227L, 327L, 627L, Kinesiology 127L, 227L, 327L, 627L. The six-hour fieldwork/ internship will require 270 hours overall or about 20 hours per week. Prerequisite: Upper-division standing, consent of the instructor, and a University grade point average of at least 2.50.

#### HED 628. Internship in Health Promotion.

Applied experiences in development, delivery, or evaluation of professional health promotion programs. One conference hour and seventeen hours of fieldwork a week for one semester. May be repeated once for credit. Prerequisite: Upper-division standing, consent of the director of the degree program in kinesiology, and a University grade point average of at least 2.50. A higher grade point average may be required.

#### HED 329K. Child and Adolescent Health.

Restricted to students in the College of Education. The foundations of child and adolescent health; health education; and the biological, environmental, and behavioral health determinants of health. Includes the application of evidence-based child and adolescent health promotion concepts; prominent health risk behaviors established during youth that increase the risk of morbidity and mortality; and the application of personal health and wellness information. Three lecture hours a week for one semester.

#### HED 129S, 229S, 329S, 629S. Topics in Health Education.

Restricted to health education and kinesiology majors. Credit is recorded while the student is enrolled at another institution in a program administered by the University's Study Abroad Office. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. Credit is recorded as assigned by the study abroad adviser in the Department of Kinesiology and Health Education. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary. May be repeated for credit when the topics vary.

#### HED 335. Theories of Substance Use and Abuse.

Restricted to health education and kinesiology majors. An introduction to the psychological, social, pharmacological, and cultural aspects of substance use and abuse. Includes a study and critique of the theories of substance use and abuse. Three lecture hours a week for one semester.

#### HED 343. Foundations of Epidemiology.

Same as Health and Society 340 (Topic 1). Introduction to the basic tenets of epidemiology as well as the different types of epidemiological study designs. Three lecture hours a week for one semester. Health Education 343 and Health and Society 340 (Topic 1) may not both be counted. Prerequisite: Consent of instructor.

#### HED 350. Theories of Health Promotion Behavioral Science.

Restricted to health promotion majors. Introduction to the field of health promotion, as applicable in the fields of health and education: theories, processes, activities, and settings for health promotion practice. Three lecture hours a week for one semester. Health Education 350 and 370K (Topic 1) may not both be counted.

#### HED 351. Needs Assessment and Program Planning.

Restricted to health promotion majors. Introduction to the processes of planning, implementing, and evaluating health promotion programs. Three lecture hours a week for one semester. Only one of the following may be counted: Health Education 351, 352K (Topic 1), 371K. Prerequisite: Health Education 350.

#### HED 352K. Studies in Health: Topical Studies.

Analysis and synthesis of the literature and discussion of current and specific issues in health. Three lecture hours a week for one semester. Laboratory work is required for some topics. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

#### Topic 3: Psychosocial Issues in Adult Development and Health.

Examines psychosocial issues in adult physical and mental health within the context of adult psychological development, using a biopsychosocial approach. Examines psychosocial factors in the major health risks in adulthood and in preventative health behavior. Also considers psychosocial factors in stress and coping and their implications for health.

#### HED 360. Adolescent Health Risk Behavior.

Overview of the biological, psychological, social, and environmental determinants of adolescent risk-taking behavior. Focuses on selected behaviors that can result in adolescent mortality, morbidity and social problems including: violence, sexual behavior, obesity-related behaviors, depression, alcohol, tobacco, and other substance use. Three lecture hours a week for one semester. Health Education 360 and 370K (Topic 2) may not both be counted.

#### HED 361. Psychosocial Issues in Women's Health.

Same as Women's and Gender Studies 345 (Topic 35). Explores psychosocial issues in women's physical and mental health, including traditional reproductive issues, disorders that are more common in women than in men, and the leading causes of death in women. Covers gender influences on health risk behaviors, and societal influences on women's health through a consideration of social norms and roles. Three lecture hours a week for one semester. Only one of the following may be counted: Health Education 352K (Topic 2: Psychosocial Issues in Women's Health), 361, Women's and Gender Studies 345 (Topic 35). Prerequisite: Upper-division standing.

#### HED 364. Strategic Health Communication.

Restricted to health education majors, kinesiology majors, and youth and community studies majors. Introduces essential components of effective communication strategies and persuasive messaging techniques to aid in the development of a strategic health campaign for a client in an allied health field. Three lecture hours a week for one semester. Health Education 352K (Topic 4) and 364 may not both be counted.

# HED 365. Social Determinants of Health and Health Disparities.

Restricted to health education and kinesiology majors. Explores social determinants of health and health disparities, as well as strategies to reduce them. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HED 366. Human Sexuality.

Analysis of the physiological, psychological, and social factors in human sexuality. Three lecture hours a week for one semester.

#### HED 370K. Topical Seminar in Health Promotion.

Identification, causes, incidence, prevention, control, and social implications of major problems in health. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Foundations of Health Promotion I.** Restricted to health promotion students. Introduction to the field of health promotion, as applicable in the fields of health and education: theories, processes, activities, and settings for health promotion practice.

Health Education 350 and 370K (Topic 1) may not both be counted. Additional prerequisite: Upper-division standing

**Topic 3: Environmental Health.** Provides an introduction to the key areas of environmental health in developed and developing countries. Using the perspectives of the population and community, the course will cover factors associated with the development of environmental health problems.

#### HED 371K. Foundations of Health Promotion II.

Introduction to the processes of planning, implementing, and evaluating health promotion programs. Three lecture hours a week for one semester. Only one of the following may be counted: Health Education 351, 352K (Topic 1), 371K. Prerequisite: Upper-division standing and Health Education 370K (Topic 1).

#### HED 373. Evaluation and Research Design.

Restricted to health promotion students. Fosters a knowledge and understanding of the research process and uses this knowledge to plan and evaluate health promotion programs. Subjects include types of experimental and non-experimental research, validity, reliability, experimental and quasi-experimental research designs, data collection procedures, measurement of health knowledge, attitudes and behaviors, data analysis, and the presentation of results. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HED 178C, 278C, 378C, 678C. Fieldwork in Health.

Undergraduate research and/or experience with a health agency in the field attempting to analyze or solve community health problems through education; students are supervised by the health agency and by the kinesiology and health education faculty. For each semester hour of credit earned, two laboratory hours a week for one semester. May be repeated for credit when the topics vary. Offered on the pass/fail basis only. Prerequisite: Upper-division standing and consent of instructor.

#### HED 378D. Peer Health Leadership I.

Restricted to students in the University Health Services program. Literature and discussion of current and specific issues in health. One conference hour and eight hours of fieldwork a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Consent of instructor.

**Topic 1: Healthyhorns Peer Educator Training.** Restricted to students in the Healthyhorns Peer Educator program. Training in the foundations of public health, with the opportunity to provide interactive and educational outreach activities such as presenting workshops to student groups and develop and staff initiatives that positively impact students' health.

**Topic 2: Mental Health Promotion.** Restricted to students in the Mental Health Promotion program.

**Topic 3: Clinic Volunteer Program.** Restricted to students in the University Health Services Clinical Volunteer Program. Analysis of literature and weekly discussion of current and specific issues relating to health. Focus on teamwork and leadership skills through a group capstone presentation at the end of the semester.

#### HED 178E. Peer Health Leadership II.

Restricted to students in the University Health Services program. Literature and discussion of current and specific issues in health. One conference hour and two hours of fieldwork a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Consent of instructor.

**Topic 1: Healthyhorns.** Restricted to students in the Healthyhorns Peer Educator program.

**Topic 2: Mental Health Promotion.** Restricted to students in the Mental Health Promotion program.

**Topic 3: Clinic Volunteer Program.** Restricted to students in the University Health Services Clinical Volunteer Program.

#### HED 178F. Peer Health Leadership III.

Restricted to students in the University Health Services program. Literature and discussion of current and specific issues in health. One conference hour and two hours of fieldwork a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Consent of instructor.

**Topic 1: Healthyhorns.** Restricted to students in the Healthyhorns Peer Educator program.

**Topic 2: Mental Health Promotion.** Restricted to students in the Mental Health Promotion program.

**Topic 3: Clinic Volunteer Program.** Restricted to students in the University Health Services Clinical Volunteer Program.

### **Kinesiology: KIN**

#### **Lower-Division Courses**

#### KIN 310. Physiological Basis of Conditioning.

Explores the ways that the human body responds to exercise and physical activity. Covers reasons that exercise is beneficial, how the body responds to exercise, and how to apply the principles of conditioning. Three lecture hours a week for one semester. Prerequisite: For nonapplied movement science, health education, and kinesiology majors, consent of instructor.

#### KIN 311. Water Safety Instruction and Lifeguard Training.

Principles and practical application of water safety instruction and lifeguard training, personal water safety skills sets, professional rescues, first aid, and CPR/AED programs. Successful completion of course sessions, activities, lectures, skill development and evaluation requirements will qualify the student to test for certifications from nationally recognized safety agencies. Three lecture hours and one laboratory hour a week for one semester. Only one of the following may be counted: Kinesiology 311, 213 (Topic 2: Water Safety Instruction), 213 (Topic 4: Lifeguarding Instruction). Offered on the letter-grade basis only.

#### KIN 311K. Sport Psychology.

Designed for applied movement science, health education, and kinesiology majors. The psychological response to sport-related stress and the influence of psychological variables on sport performance and coaching. Three lecture hours a week for one semester.

#### KIN 312. Issues in Kinesiology: Topical Studies.

Analysis and discussion of current issues within the discipline of kinesiology. Three lecture hours a week for one semester. Additional hours may be required for some topics. May be repeated for credit when the topics vary.

**Topic 2 (TCCN: PHED 2356): Care and Prevention of Athletic Injuries.** Principles of athletic training, including mechanisms, signs and symptoms, treatments, and basic rehabilitation of athletic injuries and illnesses. Three lecture hours and one laboratory/discussion hour a week for one semester.

**Topic 3: Fundamentals of Coaching.** An introduction to the principles and practices of coaching as they relate to the integration of sports science, practice structure and design, and the development of a coaching philosophy. Involves group work and field experience with youth athletic organizations.

Topic 4: Philosophy and Leadership in Sport & Physical Activity. Topic 5: Sport Industry in America. Kinesiology 312 (Topic: Sport Industry in America) and 312 (Topic 5) may not both be counted.

#### KIN 312G. Golf Instruction.

Designed to train students to teach the game of golf. Three lecture hours a week for one semester, with additional fieldwork hours to be arranged. Prerequisite: Consent of instructor.

# KIN 312M. Management of Physical Activity and Sport Programs.

Designed for applied movement science, health education, and kinesiology majors. Introduction to the purpose and function of sport and sport management in society, including management, marketing, events, and other components of the field. The equivalent of three lecture hours a week for one semester.

#### KIN 213. Safety Information and Procedures.

Factors affecting human safety; techniques and procedures to promote and ensure safe living. The equivalent of three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### Topic 1 (TCCN: PHED 1206): First Aid.

**Topic 2: Water Safety Instruction.** Restricted to Kinesiology and Health Education majors; open to others with consent of instructor. Trains instructor candidates to teach courses in swimming and water safety by developing their understanding of how to use the course materials, conduct training sessions and evaluate participants' progress. Students will be introduced to several swimming strokes, springboard diving, cardiovascular conditioning, exercise physiology, nutrition, personal safety. Elementary rescue skills and basic snorkeling techniques. Culminates in American Red Cross certification. Prerequisite: Swimming proficiency and confidence in deep water.

Topic 3: Lifeguarding.

Topic 4: Lifeguarding Instruction.

#### KIN 314 (TCCN: PHED 1331). Children's Movement.

Covers skills to support positive, effective physical education and to implement well-planned and stimulating physical activity for children. Focus on integrating academic content with physically active classrooms. Subjects include principles of movement and motor development in children, curriculum, legislation and policy, physiological principles, learning principles, coordinated school health (CSH), and comprehensive school physical activity programming (CSPAP). The equivalent of three lecture hours and three laboratory hours a week for one semester, with additional off-campus school service learning project hours to be arranged.

#### KIN 315. Motor Learning.

Psychological factors affecting performance and acquisition of motor skills. Three lecture hours and one laboratory hour a week for one semester. Kinesiology 315 and 335C may not both be counted. Prerequisite: Psychology 301.

#### KIN 316. Structure and Organization of Sport Programs.

Introduction to sport management and effective organizational behavior for sport programs. Analysis of the dynamic management process necessary for the improvement of organizational productivity. Three lecture hours a week for one semester. May be repeated once for credit. Prerequisite: Kinesiology 312M.

#### KIN 217. Advanced Scuba Diving Leadership.

Designed to prepare experienced scuba divers to instruct, organize, and conduct safe, appropriate-level dives for certified divers. Also designed to prepare students to apply for certification as a National Association of Underwater Instructors (NAUI) Assistant Instructor or Divemaster. Three lecture or open-water hours a week, and three internship hours a week for one semester participating in the training of entry-level students.

Prerequisite: Certification as a scuba rescue diver and as a National Association of Underwater Instructor (NAUI) Master Scuba Diver, or equivalent knowledge and experience.

#### KIN 119. Movement Competence.

Designed for applied movement science, health education, and kinesiology majors. Introduces a variety of movement and dance activities that can be used to teach rhythm to youth, with an emphasis on grades K-6. The equivalent of three laboratory hours a week for one semester. May be repeated for credit when the topics vary.

Topic 1: Archery. Topic 2: Ballet. Topic 3: Bowling. Topic 4: Diving. Topic 5: Fencing. Topic 6: Golf. Topic 7: Scuba Diving.

**Topic 8: Swimming.** Designed for kinesiology and health education majors. Development of swimming techniques including instruction in seven swimming strokes, springboard diving, cardiovascular conditioning, exercise physiology concepts, nutrition, personal safety, elementary rescue skills, CPR/AED and basic snorkeling techniques. Provides preparation for American Red Cross certification. Additional prerequisite: Comfortable in deep water and able to swim two lengths using two strokes, or consent of instructor; for non-kinesiology majors, consent of instructor.

**Topic 10: Conditioning.** Basic principles involved in designing a sound conditioning program emphasizing resistance training techniques. Prerequisite: Physical Education 106C (Topic 7: Weight Training), or consent of instructor.

**Topic 11: Rhythmic Activities and Dance**. Designed for applied movement science majors, and kinesiology and health education majors. Introduces a variety of movement and dance activities that can be used to teach rhythm to youth, with an emphasis on grades K-6.

#### Topic 12: Gymnastics.

#### Topic 13: Manipulative Activities.

**Topic 14: Tennis.** Introduction to methods, progressions, strategies, and teaching cues appropriate for playing, teaching, and coaching basic tennis.

**Topic 15: Volleyball.** Introduction to methods, progressions, and teaching cues appropriate for playing, teaching, and coaching basic volleyball.

**Topic 16: Social Dance: Leads.** Designed for applied movement science majors, and kinesiology and health education majors. Introduction to popular social partner dances, including swing, waltz, salsa, tango, two-step and more. Emphasis on connecting with a dance partner and the art of both leading and following. Optional dance labs for additional practice are offered. Only one of the following may be counted: Kinesiology 119 (Topic 16), Kinesiology 119 (Topic 20), Physical Education 103L (Topic 1), 103L (Topic 7). Additional prerequisite: Consent of instructor.

**Topic 17: Basketball.** Designed for applied movement science majors, and kinesiology and health education majors. Introduces methods, progressions, strategies and teaching cues appropriate for playing, teaching, and coaching basic basketball.

**Topic 18: Adventure Activities.** Acquisiton and knowledge of basic skills needed to participate in outdoor/adventure activities. Examines methods, progressions, drills, and performance cues appropriate for participating in and leading outdoor/adventure activities. Includes offcampus activities. Students will need to demonstrate basic swimming skills during the first week of class.

Topic 19: Kinesthetic Awareness and Core Body Development. Introduction to basic movement skills from simple to more complex, and how they relate to more advanced sport skills through developmental gymnastics, yoga, Pilates, and martial arts. Additional prerequisite: A major in applied movement science.

**Topic 20: Social Dance: Follows.** Designed for applied movement science majors, and kinesiology and health education majors. Introduction to popular social partner dances, including swing, waltz, salsa, tango, two-step and more. Emphasis on connecting with a dance partner and the art of both leading and following. Optional dance labs for additional practice are offered. Only one of the following may be counted: Kinesiology 119 (Topic 16), Kinesiology 119 (Topic 20), Physical Education 103L (Topic 1), 103L (Topic 7). Additional prerequisite: Consent of instructor.

#### KIN 119C. Aiding for Social Dance.

Supervised aiding in social dance leads/follows courses. Three laboratory hours a week for one semester. May be repeated for credit. Prerequisite: Consent of instructor.

#### KIN 219D. Movement Analysis: Dual Activities.

Designed for applied movement science, health education, and kinesiology majors. Application of biomechanical and motor learning principles to selected movement activities, with particular emphasis on dual sports. Includes physical activity. The equivalent of two lecture hours and one laboratory hour a week for one semester.

#### KIN 219G. Advanced Golf.

Designed for the advanced golfer. Includes technical swing analysis and instruction, course management and course play, and tournament play. Two lecture hours a week for one semester, with additional fieldwork hours to be arranged. Prerequisite: Consent of instructor, and a certified Professional Golfers Association (PGA) handicap of 15 or below or equivalent proficiency.

#### KIN 219K. Athletics.

Knowledge and skills required for officials, coaches, and athletic trainers of interschool sports. Two lecture hours and two laboratory hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

#### Topic 1: Coaching.

#### Topic 2: Officiating.

**Topic 3: Introduction to Athletic Training.** Designed for athletic training majors. An introduction to athletic training principles and theories, including the prevention, recognition, and management of athletic injuries and illnesses. Includes basic skill development in areas such as first aid, emergency care, and supportive taping, wrapping, and bracing. Requires completion of a one-day CPR and AED (BLS) course outside of class time.

#### KIN 219L. Teaching Social Dance.

Explores the basic footwork, partnering skills, and variations for a variety of social dances, and create new ideas within those styles; selection of music appropriate for each dance style and DJ this music at dance events; and researching and reconstructing social dance forms from around the world, historical and contemporary. Three laboratory hours a week for one semester. Prerequisite: Physical Education 103L (Topic 1) or 103L (Topic 7), or Kinesiology 119 (Topic 16) or 119 (Topic 20), or consent of instructor.

#### KIN 219M. Advanced Running.

Explores various advanced aspects of running training regimens, with emphasis on interval training, fartlek, speed play, long slow distance used in competitive running. Includes functional assistive training movements: flexibility and stretching, plyometrics and bounding. Three laboratory hours a week for one semester. Prerequisite: PED 106D (Topic 2) or consent of instructor.

#### KIN 219N. Advanced Volleyball.

For those with high levels of skills and knowledge of multiple offenses and defenses. Explores various aspects of competitive volleyball with emphasis on strategic utilization of defenses used in interscholastic and intercollegiate competitive teams. Three laboratory hours a week for one semester. Prerequisite: Physical Education 108J (Topic 2) or consent of instructor.

#### KIN 219P. Advanced Swimming.

Designed for the advanced swimmer. Includes technical stroke analysis on four power strokes and exposure training/conditioning programs used by interscholastic and intercollegiate competitive programs. Expanded emphasis is on body form, stroke efficiency, and conditioning in all strokes. Three laboratory hours a week for one semester. Prerequisite: Physical Education 101J (Topic 3) or consent of instructor.

#### KIN 119R, 219R, 319R, 419R, 519R, 619R, 719R, 819R, 919R. Topics in Kinesiology.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Kinesiology. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### KIN 219S. Movement Analysis: Individual Activities.

Restricted to kinesiology and health education majors. Application of movement skill analysis and biomechanical principles, physical laws of movement, fitness training principles and programs, exercise physiology, performance techniques, and skill progressions in individual activities and sport. Two lecture hours and one laboratory hour a week for one semester.

#### KIN 219T. Movement Analysis: Team Activities.

Application of scientific and psychosocial aspects of team sports, basic mechanical principles, and basic progressions relevant to performing and teaching selected team sport skills. Students also learn basic strategies and tasks related to coaching and organizing a team. Two lecture hours and one laboratory hour a week for one semester.

#### **Upper-Division Courses**

#### KIN 320. Applied Biomechanics of Human Movement.

Designed for applied movement science, health education, and kinesiology majors. Designed to provide students with an understanding of applied scientific analysis of movement. Examines the physiological, structural, and mechanical bases for human movement, with examples drawn from sport and rehabilitation. Lectures concentrate on a scientific approach to mechanisms underlying human movement and to strategies and practices of clinical and sport applications. Laboratory sessions focus on both theoretical and applied aspects of selected mechanical concepts. Two lecture hours and one and one-half laboratory hours a week for one semester. Prerequisite: For athletic training and kinesiology and health education majors: Kinesiology 424K; and Mathematics 305G, 408K, 408C, or 408N. For others: Kinesiology 424K; Biology 446L; and Mathematics 305G, 408K, 408C, or 408N.

#### KIN 321. Theory of Human Performance.

Designed for applied movement science, health education, and kinesiology majors. Examines foundational knowledge of theories of human performance and development and the concomitant changes that occur during an individuals lifespan. Explores interactive theories of the associated physiological, biomechanical, and cognitive disciplines that explain the control systems of the human body while in motion and subsequent development. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### KIN 321M. Motor Development and Performance.

A review of movement skill progressions with emphasis on the processes that underlie changes in movement competence. Typical growth and maturation from birth to adulthood serves as the metric against which to identify atypical development. The principles underlying motor skill changes are applied to teaching, coaching, and clinical applications. Three lecture hours and one laboratory hour a week for one semester. Prerequisite: Upper-division standing.

#### KIN 322. Diagnosis and Evaluation of Fitness.

Covers the science behind assessing physical fitness, and the role of physical activity and exercise in prevention and rehabilitation of cardio-respiratory and metabolic diseases. Two lecture hours and three laboratory hours a week for one semester. Prerequisite: For Athletic Training and Kinesiology and Health majors, Kinesiology 310 and Kinesiology 424K; for others, Kinesiology 310; and Kinesiology 424K or 446L.

#### KIN 424K. Applied Human Anatomy.

Combines the study of systematic and regional human anatomy. Includes applications of the skeletal system, and attachments and actions of muscles, with an emphasis on the mechanics of support and motion and their clinical applications. Three lecture hours and two laboratory hours a week for one semester. Only one of the following may be counted: Biology 478L, Kinesiology 324K, 424K. Prerequisite: For applied movement science, health education, and kinesiology majors, Kinesiology 310.

#### KIN 425K. Physiology of Exercise.

Application of principles of physiology to muscular activities and an examination of physiological responses and adaptations to both acute and chronic exercise. Three lecture hours and one and onehalf laboratory hours a week for one semester. Kinesiology 325K and 425K may not both be counted. Prerequisite: For Athletic Training and Kinesiology and Health majors, Kinesiology 424K; for others, Kinesiology 424K, Biology 416K, or 446L.

#### KIN 226. Advanced Weight Training.

Explores various advanced techniques of weight training, with emphasis on the lifts used in the competitive strength sports of weightlifting and powerlifting. Includes plyometrics and functional training movements for athletic enhancement. Two lecture hours a week for one semester. Prerequisite: Physical Education 106C or Kinesiology 119 or consent of instructor.

#### KIN 326K. Biomechanical Analysis of Movement.

Study of the principles of equilibrium, force, and motion as applied to humans. Includes applications to human movement and to biological tissues and structures, with emphasis on practical applications (e.g., human performance, causes/prevention of injury etc.). Three lecture hours a week for one semester. Prerequisite: For athletic training and kinesiology and health education majors: Kinesiology 424K; Mathematics 408C or 408K or 408N; and Physics 302K or 317K. For others: Biology 416K or Biology 446L; Kinesiology 424K; Mathematics 408C or 408K or 408N; and Physics 302K or 317K.

#### KIN 127D, 227D, 327D, 627D. Fieldwork: Aiding.

Supervised fieldwork in appropriate activity courses. For 127D, up to three hours of fieldwork a week for one semester; for 227D, up to six hours of fieldwork a week for one semester; for 327D, up to nine hours

of fieldwork a week for one semester; for 627D, up to twenty hours of fieldwork a week for one semester. May be repeated for credit up to twelve semester hours. No more than twelve semester hours in kinesiology or health education fieldwork or internship credit may be counted. May be repeated for credit. Prerequisite: Consent of instructor.

# KIN 127E, 227E, 327E, 627E. Fieldwork: Applied Learning and Development Majors.

Restricted to applied learning and development majors. Supervised fieldwork or clinical work in appropriate activities. For 127E, up to three hours of fieldwork a week for one semester; for 227E, up to six hours of fieldwork a week for one semester; for 327E, up to nine hours of fieldwork a week for one semester; for 627E, up to twenty hours of fieldwork a week for one semester. May be repeated for credit up to twelve semester hours. No more than twelve semester hours in kinesiology or health education fieldwork or internship credit may be counted. May be repeated for credit. Prerequisite: Consent of instructor.

#### KIN 627F. Internship.

Restricted to health education and kinesiology majors. Supervised fieldwork or clinical work in appropriate activities. The equivalent of twenty lecture hours a week for one semester; additional hours may be required for some topics. May be repeated for credit when topics vary up to twelve semester hours. No more than twelve semester hours in health education or kinesiology fieldwork or internship credit may be counted. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing, Kinesiology 327T (Topic 1) or 327T (Topic 2), a University grade point average of at least 2.50, and consent of instructor.

Topic 1: Internship in Health Fitness. Topic 2: Internship in Medical Fitness.

#### KIN 127J, 227J, 327J, 627J. Fieldwork: Off Campus.

Supervised fieldwork or clinical work in appropriate activities off campus. For 127J, up to three hours of fieldwork a week for one semester; for 227J, up to six hours of fieldwork a week for one semester; for 327J, up to nine hours of fieldwork a week for one semester; for 627J, up to twenty hours of fieldwork a week for one semester. May be repeated for credit up to twelve semester hours. No more than twelve semester hours in kinesiology or health education fieldwork or internship credit may be counted. May be repeated for credit. Prerequisite: Consent of instructor.

#### KIN 127K, 227K, 327K, 627K. Fieldwork: On Campus.

Supervised fieldwork or clinical work in appropriate activities on campus. For 127K, up to three hours of fieldwork a week for one semester; for 227K, up to six hours of fieldwork a week for one semester; for 327K, up to nine hours of fieldwork a week for one semester; for 627K, up to twenty hours of fieldwork a week for one semester. May be repeated for credit up to twelve semester hours. No more than twelve semester hours in kinesiology or health education fieldwork or internship credit may be counted. May be repeated for credit. Prerequisite: Consent of instructor.

# KIN 127M. Exploring Teaching and Physical Activity Leadership.

Restricted to applied movement science majors. Supervised fieldwork or clinical work in appropriate activities. One lecture hour and two hours of fieldwork each week for one semester. No more than twelve semester hours in kinesiology or health education fieldwork or internship credit may be counted. May be repeated for credit. Prerequisite: Consent of instructor.

#### KIN 127R, 227R, 327R, 627R. Fieldwork: Lab Research.

Supervised fieldwork or clinical work in appropriate activities. For 127R, up to three hours of fieldwork a week for one semester; for 227R, up to six hours of fieldwork a week for one semester; for 327R, up to nine

hours of fieldwork a week for one semester; for 627R, up to twenty hours of fieldwork a week for one semester. May be repeated for credit up to twelve semester hours. No more than twelve semester hours in kinesiology or health education fieldwork or internship credit may be counted. May be repeated for credit. Prerequisite: Consent of instructor.

#### KIN 327T. Internship.

Designed for health education and kinesiology majors. Supervised fieldwork or clinical work in appropriate activities. Students are required to obtain 135 hours of supervised internship. May be repeated for credit when topics vary up to twelve semester hours. No more than twelve semester hours in health education or kinesiology fieldwork or internship credit may be counted. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing, a University grade point average of at least 2.50, and consent of instructor; additional prerequisites vary by topic.

**Topic 1: Clinical Exercise Testing.** Kinesiology 327L (Topic 6) and 327T (Topic 1) may not both be counted. Additional prerequisite: Kinesiology 322

**Topic 2: Personal Training.** Kinesiology 327L (Topic 5) and 327T (Topic 2) may not both be counted. Additional prerequisite: Kinesiology 332. **Topic 3: Practicum in Disabilities.** Supervised academic service learning or clinical hours in instructor approved environments. Kinesiology 327L (Topic 9) and 327T (Topic 3) may not both be counted.

**Topic 4: Strength and Condition Coaching.** Additional prerequisite: Credit or concurrent enrollment in Kinesiology 226 or 363.

#### KIN 628. Fieldwork in Sport Management.

Restricted to sport management majors. Twenty-seven hours of fieldwork a week for one semester. Requires 270 hours overall or about 20 hours per week. Students will be required to have no more than six hours remaining in their cognate to be eligible. May be taken twice for credit. No more than twelve semester hours in the following courses may be counted: Kinesiology 127L, 227L, 327L, 627L, 628. May be repeated for credit. Prerequisite: Upper-division standing, a University grade point average of at least 2.50, and consent of the faculty adviser.

#### KIN 328C. Internship in Sport Management.

Restricted to students majoring in sport management. Supervised fieldwork or clinical work in appropriate activities. Students are required to obtain 135 hours of supervised internship. No more than twelve semester hours in health education or kinesiology fieldwork or internship credit may be counted. Only one of the following may be counted: Kinesiology 327L (Topic: Fieldwork in Sport Management), 327L (Topic 2), 628, 328C. May be repeated for credit. Prerequisite: Upper-division standing, a major grade point average of 2.50, and consent of instructor.

#### KIN 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Kinesiology.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Kinesiology. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### KIN 330E. Sport Nutrition.

The nutritional needs of people whose physical activity ranges from recreational to elite competitive athletics. Development of practical dietary strategies based upon understanding how macronutrients, vitamins, minerals, and water are digested and absorbed for metabolism. Three lecture hours a week for one semester.

#### KIN 331. Physical Aging in America.

Three lecture hours a week for one semester. Kinesiology 331 and 352K (Topic: Physical Aging in America) may not both be counted. Prerequisite: Upper-division standing; Kinesiology 310, 315, or 325K; and six additional semester hours of coursework in kinesiology.

#### KIN 332. Techniques of Fitness Leadership.

Practical application of theoretical content from exercise physiology, anatomy, and biomechanics. Emphasis on program design and development for healthy adults and special populations. Three lecture hours a week for one semester, with additional laboratory hours to be arranged. Prerequisite: Kinesiology 310.

#### KIN 334. Children's Exercise and Physical Activity.

Focuses on the capacity for physical performance by children and adolescents from both physiological and psychosocial perspectives. Addresses children's readiness for physical training and competitive activities. Considers the active and inactive child with, and without, disabilities and secondary disabling conditions. Entails development of programs designed to keep children appropriately active for a lifetime of positive health outcomes. Three lecture hours a week for one semester. Prerequisite: Kinesiology 310.

#### KIN 335C. Motor Learning.

Psychological, behavioral, physiological, and environmental factors involved in performance and learning of motor skills; covers both theoretical and experimental evidence for the effects of these factors, with applications in physical activity, sport, and rehabilitation. Weekly laboratory sessions to collect and analyze data to assess motor performance and learning. Two lecture hours and one and one-half laboratory hours a week for one semester. Kinesiology 315 and 335C may not both be counted. Prerequisite: Psychology 301.

#### KIN 336. Neuromuscular Control.

Study of the brain and motor and sensory pathways involved in the control of movement. Covers nerve, muscle, and sensory cell function along with spinal cord reflexes. Application to research and clinical populations is emphasized. Three lecture hours a week for one semester. Prerequisite: For Athletic Training and Kinesiology and Health majors, Kinesiology 424K; for others, Kinesiology 424K or 446L.

#### KIN 338. Motor Development and Assessment.

Training in screening, diagnostic, and programmatic motor assessment instruments. Designed to give students practical experience in assessing physical and motoric development in children with and without disabilities. Three lecture hours a week for one semester. Prerequisite: Kinesiology 321M; Kinesiology 360 topic 9 is recommended.

#### KIN 340. Modern Olympic Movement in World Affairs.

Examination of the place of the modern Olympic movement in world affairs. The cultural, political, and economic dynamics of this relationship will receive special emphasis.

#### KIN 140C. Practicum in Athletic Training: Level 1A.

Supervised clinical experiences in the application of concepts, theories, and techniques associated with the prevention, recognition, and immediate care of injuries and illnesses suffered by athletic and physically active populations. Students use cognitive, psychomotor, and affective skills and knowledge to complete a prescribed set of educational competencies and clinical proficiencies under the direction of an approved clinical instructor. One lecture hour and twenty hours of fieldwork a week for one semester. Prerequisite: Consent of instructor.

#### KIN 140D. Practicum in Athletic Training: Level 1B.

Supervised clinical experiences in the application of concepts, theories, and techniques associated with the prevention, recognition, immediate care, and treatment of injuries and illnesses suffered by athletic and physically active populations. Emphasizes the application of therapeutic modalities and soft-tissue therapy techniques. Students use cognitive psychomotor and affective skills and knowledge to complete a prescribed set of educational competencies and clinical proficiencies under the direction of a clinical preceptor. One lecture hour and twenty hours of fieldwork a week for one semester. Prerequisite: Consent of instructor.

#### KIN 140E. Practicum in Athletic Training: Level 2A.

Supervised clinical experiences in the application of concepts, theories, and techniques associated with the prevention, recognition, immediate care, treatment, evaluation, and diagnosis of injuries and illnesses suffered by athletic and physically active populations. Emphasizes clinical evaluation and assessment techniques. Students use cognitive, psychomotor, and affective skills and knowledge to complete a prescribed set of educational competencies and clinical proficiencies under the direction of an approved clinical instructor. One lecture hour and twenty hours of fieldwork a week for one semester. Prerequisite: Consent of instructor.

#### KIN 140F. Practicum in Athletic Training: Level 2B.

Supervised clinical experiences in the application of concepts, theories, and techniques associated with the prevention, recognition, immediate care, treatment, evaluation, diagnosis, rehabilitation, and reconditioning of injuries and illnesses suffered by athletic and physically active populations. Emphasizes therapeutic exercise and rehabilitation procedures. Students use cognitive, psychomotor, and affective skills and knowledge to complete a prescribed set of educational competencies and clinical proficiencies under the direction of a clinical preceptor. One lecture hour and twenty hours of fieldwork a week for one semester. Prerequisite: Consent of instructor.

#### KIN 140G. Practicum in Athletic Training: Level 3A.

Supervised clinical experiences in the application of concepts, theories, and techniques associated with the prevention, recognition, immediate care, treatment, evaluation, diagnosis, rehabilitation, and reconditioning of injuries and illnesses suffered by athletic and physically active populations. Emphasizes general medical conditions. Students use cognitive psychomotor and affective skills and knowledge to complete a prescribed set of educational competencies and clinical proficiencies under the direction of an approved clinical instructor. One lecture hour and twenty hours of fieldwork a week for one semester. Prerequisite: Consent of instructor.

#### KIN 140J. Practicum in Athletic Training: Level 3B.

Supervised clinical experiences in the application of concepts, theories, and techniques associated with the prevention, recognition, immediate care, treatment, evaluation, diagnosis, rehabilitation, and reconditioning of injuries and illnesses suffered by athletic and physically active populations. Emphasizes the administrative and professional aspects of managing these conditions. Students use cognitive psychomotor and affective skills and knowledge to complete a prescribed set of education competencies and clinical proficiencies under the direction of a clinical preceptor. One lecture hour and twenty hours of fieldwork a week for one semester. Prerequisite: Consent of instructor.

#### KIN 140M. Advanced Manual Therapy.

Designed for athletic training majors. Examines the theory and application of manual therapy techniques in patient care. The athletics and physically active populations will be targeted and an aggressive treatment approach for the restoration of function as quickly and as safely as possible will be emphasized. One lecture hour and one laboratory hour a week for one semester. May be repeated for credit.

#### KIN 140S. Senior Seminar in Athletic Training.

Designed for athletic training majors. Explores the study and practice of reviewing and applying research findings and evidence based practice concepts to ask and answer clinically relevant questions affecting clinical practice for athletic trainers. One lecture hour a week for one semester. May be repeated for credit. Prerequisite: Enrollment in the Athletic Training Program or consent of instructor.

#### KIN 341. Therapeutic Modalities in Athletic Training.

Designed for athletic training majors. The study and practice of using therapeutic modalities, including soft tissue and manual therapy techniques, to treat athletic injuries. Covers physiological effects, indications, contraindications, protocols, injury pathology, and tissue healing. Three lecture hours and one laboratory hour a week for one semester. Prerequisite: For non-athletic training majors, consent of instructor.

# KIN 342. Clinical Evaluation of Athletic Injuries in the Lower Body.

Designed for athletic training majors. The study and practice of techniques involved in the evaluation of athletic injuries affecting the lower body. Three lecture hours and one laboratory hour a week for one semester. Prerequisite: For non-athletic training majors, consent of instructor.

# KIN 343. Clinical Evaluation of Athletic Injuries in the Upper Body.

Designed for athletic training majors. The study and practice of techniques involved in the evaluation of athletic injuries affecting the upper body. Three lecture hours and one laboratory hour a week for one semester. Prerequisite: For non-athletic training majors, consent of instructor.

# KIN 344. Therapeutic Exercise and Rehabilitation Techniques: Lower Body.

Designed for athletic training majors. The study and practice of therapeutic exercise techniques and rehabilitation protocols in treating athletic injuries and illnesses. Three lecture hours and one laboratory hour a week for one semester. Prerequisite: For non-athletic training majors, consent of instructor and concurrent enrollment in Kinesiology 344U.

# KIN 344U. Therapeutic Exercise and Rehabilitation: Upper Body.

Designed for athletic training majors. Explores the theory and application of therapeutic exercise techniques and rehabilitation protocols. The athletics and physically active populations will be targeted and an aggressive treatment approach for the restoration of function as quickly and as safely as possible will be emphasized. The classroom and laboratory experiences will provide the student with opportunities to apply these techniques under the direct guidance of knowledgeable clinicians specializing in athletic training. Three lecture hours and one laboratory hour a week for one semester. May be repeated for credit. Prerequisite: For non-athletic training majors, consent of instructor and concurrent enrollment in Kinesiology 344.

#### KIN 345. General Medical Conditions in Athletic Training.

Designed for athletic training majors. Presentations, including some by medical and allied medical specialists, covering topics in athletic training and sports medicine. Three lecture hours and one laboratory hour a week

for one semester. Prerequisite: For non-athletic training majors, consent of instructor.

#### KIN 346. Athletic Training Program Administration.

Designed for athletic training majors. The study of organizational and administrative principles involved with athletic training programs. Includes legal issues, budgetary concerns, and policies and procedures. Also includes resume development and career planning. Three lecture hours a week for one semester. Prerequisite: For non-athletic training majors, consent of instructor.

# KIN 347. Historical and Ethical Issues in Physical Culture and Sports.

Designed for applied movement science, health education, and kinesiology majors. Explores the history of sport industry and sport science and how laboratory revelations lead to new fitness regimens. Covers ethical issues in the field of physical culture and sport, such as the use of ergogenic drugs, the social consequences of high performance sport, and professional ethics in the fields of kinesiology and health education. Two lecture hours and one discussion section hour a week for one semester.

#### KIN 348. Psychological Aspects of Exercise.

Designed for applied movement science, health education, and kinesiology majors. Examines both the psychological benefits that accrue from exercise, such as reduced depression and stress, as well as the psychological predictors of exercise adherence. Three lecture hours a week for one semester.

#### KIN 349. History of Sport and Physical Activity.

Restricted to students in the Bachelor of Science in Kinesiology and Health with a major in physical culture and sports or sport management. Significant developments in sport and physical activity since prehistoric time; emphasis on events influencing contemporary American programs and the International Olympic Games. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### KIN 350. Sociological Aspects of Sport and Physical Activity.

Restricted to students in the Bachelor of Science in Kinesiology and Health with a major in physical culture and sports or sport management. Three lecture hours a week for one semester. Kinesiology 350 and 352K (Topic: Sociological Aspects of Sport and Physical Activity) may not both be counted.

#### KIN 351. Philosophy of Sport and Physical Activity.

Designed for applied movement science, health education, and kinesiology majors. Introduction to the ideas and methodologies of the philosophic exploration of play, sport, athletics, exercise, and the body. Emphasis on the study of sport and ethics. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### KIN 352K. Studies in Human Movement: Topical Studies.

Analysis and synthesis of the literature and discussion of current and specific issues in kinesiology. Three lecture hours a week for one semester. Laboratory work is required for some topics. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 3: Women and Sport**. Same as Women's and Gender Studies 345 (Topic 5: Women and Sport).

#### Topic 5: Sport, Fitness, and Mass Media.

**Topic 6: Race and Sport in African American Life**. Same as African and African Diaspora Studies 372E (Topic 19) and Anthropology 324L (Topic 26). Only one of the following may be counted: African and African Diaspora Studies 372E (Topic 19), 374 (Topic 27),

Anthropology 324L (Topic 26), Kinesiology 352K (Topic 6) Additional prerequisite: Upper-division standing.

**Topic 18: Physiology of Brain Injury.** Examines the physiology of healthy brain and neural function and the pathophysiology associated with brain injury and the subsequent detection, diagnosis, treatment, short and long term consequences, and strategies to protect from and prevent brain injury. Additional prerequisite: Upper-division standing, Kinesiology 324K, and 325K.

**Topic 28: Musculoskeletal Functional Anatomy.** Analysis and synthesis of the literature and discussion of current and specific issues in kinesiology. Kinesiology 352K (Topic 28) and 352K (Topic: MUSCULOSKLTL FUNCTNL ANTMY) may not both be counted. Additional prerequisite: Kinesiology 424K and consent of department.

#### KIN 353. Sport Law.

Designed for sport management majors. Introduction to the United States legal system and to the major cases, laws, and regulations that together make up "sports law." Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### KIN 354. Sport and Event Marketing.

Restricted to sport management majors. Application of the fundamental principles used in the marketing of sport and events. An introduction to service quality for increasing customer satisfaction and effectiveness of sport organizations. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### KIN 355. Media and Public Relations in Sport.

Designed for sport management majors. Examination and application of the concepts of public and media relations to sport and leisure organizations. Subjects include effective interpersonal communication, persuasion, media relations, publicity tactics, social and new media, and writing and oral communications skills. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### KIN 356. Revenue and Budgeting in Sport.

Restricted to students in the Bachelor of Science in Kinesiology and Health with a major in sport management. Introduction to financial analysis and budgeting techniques in the context of sport organizations; conventional and innovative methods for the acquisition of revenue available to sport organizations. Three lecture hours a week for one semester.

#### KIN 357. Strategic Management of Sport Organizations.

Designed for sports management majors. Examines the strategic development of sport and health promotion programs. Focus on strategy development within organizations, which includes complementary course material deriving from various sub-disciplines related to strategic thinking and decision-making. Two lecture hours and one discussion hour a week for one semester. Prerequisite: Upper-division standing; Kinesiology 354; and Kinesiology 356 or three hours of Accounting or three hours of Finance coursework.

#### KIN 360. Programming for People with Disabilities.

Covers early detection of disabilities in children, assessment, recommendations for educational settings, and writing an Individualized Education Program. Reviews real-life scenarios featuring individuals with disabilities in active settings. Covers skills useful for a career in a school environment, public policy, and recreation. Three lecture hours a week and twelve service learning hours arranged with instructor for one semester. Prerequisite: Six semester hours of coursework in kinesiology, or consent of instructor.

#### KIN 361. Coaching Theory and Principles I.

Examines the philosophy, ethics, strategies, motivational techniques, performance analysis, program organization, contest administration, and facilities management related to coaching. Three lecture hours a week for one semester. Prerequisite: Kinesiology 312.

#### KIN 362. Coaching Theory and Principles II.

Examines the process of becoming a successful coach and developing a coaching protocol for a specific sport. Three lecture hours a week for one semester. Prerequisite: Kinesiology 361

#### KIN 363. Theory and Practice in Strength Coaching.

Covers the physiology and biomechanics of strength training and conditioning, as well as popular assessment protocols and exercise prescription principles. Covers management of a strength/conditioning facility, including organization and administration, staff utilization, integration of weight training with other training techniques, and standard strength coaching practices. Three lecture hours a week for one semester. Prerequisite: Kinesiology 310 or 424K.

# KIN 364. Aquatic Facility Operator: Management and Administration.

Designed to prepare the aquatic professional for leadership in the management of indoor and outdoor facilities. Includes aquatic facility operation, administration of programs, physical operations, policies and procedures, and staff development and training. Includes design, pool operation, water chemistry, facility management, safety procedures and risk management, budgeting, and marketing aquatic programs. Studies educational, sport, and recreational aspects of pools, lakes, camps, and beachfronts. Three lecture hours a week for one semester.

#### KIN 365. The Business of Golf.

Restricted to students in the College of Education. Designed for students pursuing a career in the golf business. Includes clubhouse and links management, sales, agronomy, technology, and equipment. Three lecture hours a week for one semester.

#### KIN 370K. Topical Seminar in Health Promotion.

Identification, causes, incidence, prevention, control, and social implications of major problems in health. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

#### Topic 1: Emergency Medical Technology.

# KIN 375. Issues and Trends in Developmental Movement Programs.

Introduction to issues related to the goals, organization, and success of developmental movement programs, such as school physical education, youth sports, YMCA, and other recreation programs and community activities. Issues include equity, competition, fitness, social development, safety and liability, and sportsmanship. Involves group work and observation and involvement in community programs. Two lecture hours and three laboratory hours a week for one semester.

#### KIN 376. Measurement in Kinesiology.

Measurement and assessment procedures; application of statistical procedures; standards for authentic assessment; measurement/ assessment selection and evaluation; use of technology in tracking development of motor skills and fitness. Three lecture hours a week for one semester. Prerequisite: Six semester hours of upper-division coursework in kinesiology.

#### KIN 178, 278, 378, 678. Fieldwork in Health.

Undergraduate research and/or experience with a health agency in the field attempting to analyze or solve community health problems through education; supervision by the health agency and by the kinesiology and health education faculty. For each semester hour of credit earned, two laboratory hours a week for one semester. Some topics are offered on the pass/fail basis only; these are identified in the Course Schedule. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and consent of instructor.

Topic 1: Substance Abuse Prevention I. Topic 2: Substance Abuse Prevention II. Topic 3: Sexual Health I. Topic 4: Substance Abuse Prevention III.

#### KIN 379H. Honors Tutorial Course.

Readings or a research project, under the supervision of a faculty member, in specific areas of research within kinesiology. Three lecture hours a week for one semester. May be repeated for credit. Prerequisite: A University grade point average of at least 3.00 and consent of instructor.

#### **Physical Education: PED**

#### **Lower-Division Courses**

#### PED 101J. Swimming.

Three laboratory hours a week for one semester. May be repeated for credit when the topics vary.

Topic 1: Beginning Swimming I. For nonswimmers. Elementary physical and mental adjustments, four basic strokes, water safety. Topic 2: Beginning Swimming II. For well-adjusted but weak swimmers. Five basic strokes, elementary diving, water safety. Topic 3: Intermediate Swimming. For the average swimmer. Six power strokes, diving, water safety, introduction to conditioning. Topic 5: Stroke Technique and Fitness Swimming.

# PED 102G (TCCN: PHED 1151, PHED 1152). Skin Diving and Scuba Diving.

Training in underwater safety, skin and scuba skills, care of equipment. Culminates in PADI certification. Three laboratory hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Advanced-level swimming skills. Strong swimming and survival skills required.

**Topic 1: Basic Scuba Diving.** Classroom, pool, and open water training with emphasis on underwater safety, the skills of skin and scuba diving, equipment, the underwater environment, planning for a dive. Culminates in nationally recognized certification.

**Topic 2: Intermediate Scuba Diving.** Open to divers with Basic Certification. Classroom, pool, and open water training with emphasis on navigation, air consumption, emergency procedures, night dives. Culminates in nationally recognized certification.

**Topic 3: Advanced Scuba Diving.** Open to experienced divers with Intermediate Certification. Classroom, pool, and open water training with emphasis on deep dives, mapping, search and research diving, equipment rescue work. Culminates in nationally recognized certification.

#### PED 103L. Social Dance.

Three laboratory hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Beginning Social Dance: Leads.** Introduction to popular social partner dances, including swing, waltz, two-step, salsa, tango and more. Emphasis on connecting with a dance partner and the art of

leading and following. Only one of the following may be counted: Kinesiology 119 (Topic 16), Kinesiology 119 (Topic 20), Physical Education 103L (Topic 1), 103L (Topic 7).

**Topic 2: Intermediate Social Dance.** An intermediate survey of popular social dances. Includes more complex partnering and variations in familiar and new dance styles. Only one of the following may be counted: Physical Education 103L (Topic 2), 103L (Topic 4), 103L (Topic 8). Additional prerequisite: Kinesiology 119 (Topic 16) or Physical Education 103L (Topic 1).

**Topic 3: Advanced Social Dance.** An advanced survey of popular social partner dances. Includes advanced partnering, role reversal, and an emphasis on creativity and style. Only one of the following may be counted: Physical Education 103L (Topic 3), 103L (Topic 5), 103L (Topic 6). Additional prerequisite: Physical Education 103L (Topic 2), and audition on first class meeting.

**Topic 4: Intermediate Social Dance: Follows.** An intermediate survey of popular social dances. Includes more complex partnering and variations in familiar and new dance styles. Only one of the following may be counted: Physical Education 103L (Topic 2), 103L (Topic 4), 103L (Topic 8).

**Topic 5: Advanced Social Dance: Leads.** An advanced survey of popular social partner dances. Includes advanced partnering, role reversal, and an emphasis on creativity and style. Only one of the following may be counted: Physical Education 103L (Topic 3), 103L (Topic 5), 103L (Topic 6). Additional prerequisite: Physical Education 103L (Topic 8), and audition on first class meeting.

**Topic 6: Advanced Social Dance: Follows.** An advanced survey of popular social partner dances. Includes advanced partnering, role reversal, and an emphasis on creativity and style. Only one of the following may be counted: Physical Education 103L (Topic 3), 103L (Topic 5), 103L (Topic 6). Additional prerequisite: Physical Education 103L (Topic 4), and audition on first class meeting.

**Topic 7: Beginning Social Dance: Follows.** Introduction to popular social dances, including swing, waltz, two-step, salsa, tango, and more. Emphasis on connecting with a dance partner and the art of leading and following. Only one of the following may be counted: Kinesiology 119 (Topic 16), Kinesiology 119 (Topic 20), Physical Education 103L (Topic 1), 103L (Topic 7).

**Topic 8: Intermediate Social Dance: Leads.** An intermediate survey of popular social partner dances. Includes advanced partnering, role reversal, and an emphasis on creativity and style. Only one of the following may be counted: Physical Education 103L (Topic 2), 103L (Topic 4), 103L (Topic 8). Additional prerequisite: Physical Education 103L (Topic 1) and audition on first class meeting.

#### PED 104P. Tennis.

Three laboratory hours a week for one semester. May be repeated for credit when the topics vary.

Topic 1: Beginning Tennis. For the nonplayer.

Topic 2: Advanced Beginning Tennis. For players with weak strokes and serves.

**Topic 3: Intermediate Tennis.** Additional prerequisite: Physical Education 104P (Topic 1) or consent of instructor.

**Topic 4: Advanced Intermediate Tennis.** Additional prerequisite: Physical Education 104P (Topic 1) or consent of instructor.

**Topic 5: Advanced Tennis.** Additional prerequisite: Physical Education 104P (Topic 1) or consent of instructor.

#### PED 104R. Racquetball.

Three laboratory hours a week for one semester. May be repeated for credit when the topics vary.

Topic 1: Beginning Racquetball. For the nonplayer.

**Topic 2: Intermediate Racquetball.** Additional prerequisite: Credit for Physical Education 104R (Topic 1) or consent of instructor.

**Topic 3: Advanced Racquetball.** Additional prerequisite: Credit for Physical Education 104R (Topic 2) or consent of instructor.

#### PED 105C. Handball.

Three laboratory hours a week for one semester. May be repeated for credit when the topics vary.

Topic 1: Beginning Handball. For the nonplayer.
Topic 2: Intermediate Handball. Additional prerequisite: Physical Education 105C (Topic 1) or consent of instructor.
Topic 3: Advanced Handball. Additional prerequisite: Physical Education 105C (Topic 2) or consent of instructor.
Topic 4: Handball Doubles. Additional prerequisite: Physical Education 105C or consent of instructor.

#### PED 105M. Fencing.

Three laboratory hours a week for one semester. May be repeated for credit when the topics vary.

Topic 1: Beginning Fencing: Foil.

Topic 2: Beginning Fencing: Epee.

**Topic 3: Intermediate Fencing: Foil.** Prerequisite: Physical Education 105M (Topic 1).

**Topic 4: Intermediate Fencing: Epee.** Prerequisite: Physical Education 105M (Topic 2).

**Topic 5: Intermediate Fencing: Saber.** Prerequisite: Physical Education 105M (Topic 1).

Topic 6: Advanced Fencing: Foil. Prerequisite: Any intermediate-level fencing course.

#### PED 105R. Karate/Tae Kwon Do.

Includes self-defense. Three laboratory hours a week for one semester. May be repeated for credit when the topics vary.

Topic 1: Beginning Karate/Tae Kwon Do. Prerequisite: No experience required.

**Topic 2: Intermediate Karate/Tae Kwon Do.** Additional prerequisite: Karate/Taekwondo experience.

**Topic 3: Advanced Karate/Tae Kwon Do.** Additional prerequisite: Karate/Taekwondo experience.

#### PED 105T. Judo.

Includes self-defense. Three laboratory hours a week for one semester. May be repeated for credit when the topics vary.

Topic 1: Beginning Judo. Prerequisite: No experience required. Topic 2: Intermediate Judo. Prerequisite: Judo experience. Topic 3: Advanced Judo. Additional prerequisite: Previous judo experience.

#### PED 105U. Beginning Hapkido/Self-Defense.

Three laboratory hours a week for one semester. Physical Education 105T (Topic: Beginning Hapkido/Self-Defense) and 105U may not both be counted.

#### PED 106C. Conditioning.

Three laboratory hours a week for one semester. May be repeated for credit when the topics vary.

**Topic 1: Swim Conditioning.** Additional prerequisite: Comfortable in deep water and able to swim 50 yards.

Topic 2: Cardiovascular and Weight Training.

Topic 3: Aerobic Walking.

Topic 4: Aerobics.

**Topic 5: Body Works**. Step training with emphasis on muscular/ strength endurance work, and inclusion of yoga and pilates. Combines aerobic conditioning with muscular work for a shorter, more intense aerobic segment followed by a challenging muscular workout for the trunk and upper and lower body. Designed to improve body composition, aerobic capacity, muscular endurance, muscular strength, and overall flexibility.

Topic 6: Circuit Aerobics.

Topic 7: Weight Training.

#### PED 106D. Running.

Three laboratory hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 1: Beginning Running. Topic 2: Intermediate Running. Topic 3: Advanced Running.

#### PED 107C. Archery.

Three laboratory hours a week for one semester. May be repeated for credit when the topics vary.

Topic 1: Beginning Archery. Basic form.

**Topic 2: Intermediate Archery.** Bow mechanics and competition. Prerequisite: Archery experience.

**Topic 3: Intermediate Field Archery.** Prerequisite: Archery experience. **Topic 4: Advanced Archery.** Tournament shooting and psychology of competition. Prerequisite: Intermediate-level archery skills or 225 FITA average.

#### PED 107D. Golf.

Three laboratory hours a week for one semester. May be repeated for credit when the topics vary.

#### Topic 1: Beginning Golf.

**Topic 2: Intermediate Golf.** Additional prerequisite: One semester of beginning golf or an eighteen hole scoring average of seventy five to ninety.

**Topic 3: Beginning Golf II.** Physical Education 107D (Topic: Beginning Golf II) and 107D (Topic 3) may not both be counted. Additional prerequisite: Physical Education 107D (Topic 1).

#### PED 107L. Gymnastics.

Three laboratory hours a week for one semester. May be repeated for credit when the topics vary.

#### Topic 1: Beginning Tumbling and Trampoline.

**Topic 2: Intermediate Tumbling and Trampoline.** Prerequisite: Tumbling and trampoline experience.

**Topic 3: Rhythmic Gymnastics.** Combination of gymnastics and dance movements performed to music using the hand apparatus of balls, hoops, ribbons, or ropes.

**Topic 4: Beginning Gymnastics I.** Apparatus work in either men's or women's Olympic gymnastics events.

**Topic 5: Beginning Gymnastics II.** Apparatus work in either men's or women's Olympic gymnastics events. Prerequisite: Limited gymnastics experience.

**Topic 6: Intermediate Gymnastics.** Apparatus work in either men's or women's Olympic gymnastics events. Prerequisite: Gymnastics experience.

**Topic 7: Intermediate Advanced Gymnastics**. Apparatus work in either men's or women's Olympic gymnastics events. Intense activity. Prerequisite: Gymnastics experience.

**Topic 8: Advanced Gymnastics.** Apparatus work in either men's or women's Olympic gymnastics events. Intense activity. Prerequisite: Intermediate-level gymnastics experience.

#### PED 108C. Basketball.

Three laboratory hours a week for one semester. May be repeated for credit when the topics vary.

**Topic 1: Beginning Basketball.** For those with little or no basketball experience.

Topic 2: Intermediate Basketball. For those with some skills in the game.

**Topic 3: Advanced Basketball**. For those with high skill and some competitive experience.

**Topic 4: Basketball: All Level.** Physical Education 108C (Topic: Basketball: All Level) and 108C (Topic 4) may not both be counted.

#### PED 108J. Power Volleyball.

Three laboratory hours a week for one semester. May be repeated for credit when the topics vary.

**Topic 1: Beginning Power Volleyball.** For those with few or no volleyball skills.

Topic 2: Intermediate Power Volleyball. For those with good basic skills: bump, set, spike, serve.

**Topic 3: Advanced Power Volleyball.** For those with high skills and knowledge of multiple offenses.

#### PED 108S. Softball.

Three laboratory hours a week for one semester. May be repeated for credit when the topics vary.

**Topic 1: Beginning Softball.** For those with few softball skills. **Topic 2: Intermediate Softball.** For those with experience and good basic skills.

# Upper-Division Courses **Science**

#### Science: SCI

### Lower-Division Courses

#### Upper-Division Courses

#### SCI 360. Seminar on Recent Advances in Science.

Recent advances in the life, earth/space, and physical sciences. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: For certified teachers, a bachelor's degree or consent of instructor; for others, six semester hours of coursework in science, in the biological sciences, in one of the physical sciences, or in one of the earth/space sciences, or consent of instructor.

Topic 1: Life Science. Topic 2: Earth Science. Topic 3: Physical Science.

#### SCI 365. Physics by Inquiry.

Investigates two areas of natural sciences and technology: electric circuits, an engineered phenomenon, and optics, the interaction of light and vision, physical and biological natural phenomena. Three lecture hours a week for one semester. Science 360 (Topic 4) and 365 may not both be counted.

## **Special Education**

#### **Special Education: SED**

#### **Lower-Division Courses**

## SED 303. Autism Spectrum Disorder: Truths and Consequences.

Focus on approaches and strategies that help improve the lives of people with ASD. Examines the role research plays in what people know about various claims. Explores how research findings are communicated, and how to best translate research findings into everyday language. The equivalent of three lecture hour a week for one semester.

#### **Upper-Division Courses**

#### SED 332. Field Experiences in Special Education.

Observation and participation in a variety of educational settings that serve children with disabilities. Two lecture hours and two four-hour sessions of fieldwork a week for one semester. Fieldwork sessions must be arranged between 8:00 AM and noon. Required for all undergraduate students seeking special education certification.

#### SED 337. Intercultural Communication and Collaboration.

Basic principles of interpersonal and intergroup communication in culturally and linguistically diverse educational settings. Designed to help students understand the relationship between culture, language, and disability using a variety of formats, including discussion, dialogue, journals, simulations, case studies, and field-based assignments. Three lecture hours a week for one semester. Required for undergraduate students seeking special education certification. Prerequisite: Admission to the teacher preparation program and consent of the Office of Student Field Experiences.

#### SED 360, 960. Apprenticeship: Research to Practice.

Supervised practicum in special education classroom teaching, conducted in cooperating schools, as part of the teacher preparation program. Consists of teaching, analysis, and evaluation. Two lecture hours and at least fifteen, thirty, or forty-five hours of fieldwork a week for one semester. Required for undergraduate students seeking special education certification. Offered on the pass/fail basis only. Prerequisite: Admission to the teacher preparation program and consent of the Office of Student Field Experiences.

## SED 372. Assessment of Individuals with Mild to Moderate Disabilities.

Assessment and high-stakes testing policies, procedures, and practices in special education; curriculum-based measurement used to monitor academic outcomes for students with disabilities; and principles and procedures used to reduce misidentification of individuals from culturally and linguistically diverse backgrounds and with limited English proficiency. Assessment data and individualized education plan development is also covered. Three lecture hours a week for one semester. Required for students seeking special education certification. Prerequisite: Admission to the teacher preparation program and consent of the Office of Student Field Experiences.

## SED 375C. Teaching Individuals with Mild to Moderate Disabilities.

Instructional practices associated with improved outcomes for students with mild to moderate disabilities receiving services in general and special education classrooms, including an emphasis on teaching reading in content areas, such as mathematics, science, and social studies. Three lecture hours and sixteen to twenty internship hours a week for one semester. Required for students seeking special education certification. Prerequisite: Admission to the teacher preparation program and consent of the Office of Student Field Experiences.

#### SED 376. Foundations and Issues in Special Education.

Key issues affecting decision-making and practices by special education teachers, assessment personnel, and administrators related to the treatment and education of students with disabilities. Three lecture hours a week for one semester. Required for students seeking special education certification.

#### SED 377. Transition and the Exceptional Learner.

An overview of the transitions within the life span, particularly the transition to postsecondary school settings for individuals with disabilities. Designed to help students develop the ability to infuse transition-related topics into curricula, assess transition needs, develop transition plans, and become knowledgeable about existing vocational and community services. Three lecture hours a week for one semester, with fieldwork to be arranged. Required for students seeking special education certification. Prerequisite: Applied Learning and Development 322 and consent of the undergraduate adviser.

#### SED 378D. Assessment Practices in Autism and Developmental Disabilities.

Assessment practices for developing and evaluating educational programs for individuals with autism and developmental disabilities. Considers the theoretical orientations that underlie the major assessment strategies, including standardized, behavioral, and informal practices. Three lecture hours and three hours of fieldwork a week for one semester. Required for students seeking special education certification. Prerequisite: Admission to the teacher preparation program and consent of the Office of Student Field Experiences.

#### SED 378E. Advanced Early Childhood Intervention.

Designed to assist students in acquiring in-depth knowledge of early childhood intervention, particularly related to services within the state of Texas, including an understanding of the legal policies related to serving young children with disabilities and their families. Three lecture hours and eight hours of fieldwork a week for one semester. Required for students seeking special education certification. Prerequisite: Admission to the teacher preparation program and consent of the Office of Student Field Experiences.

## SED 378R. Reading Assessment and Development with Diverse Populations.

The knowledge and skills associated with assessing, instructing, and monitoring the progress of students who experience mild to moderate difficulties with reading, as well as students with dyslexia. The emphasis is on reading, spelling, and writing for kindergarten through grade five. Three lecture hours and four hours of fieldwork a week for one semester. Required for students seeking special education certification. Prerequisite: Admission to the teacher preparation program and consent of the Office of Student Field Experiences.

## SED 378S. Teaching Individuals with Autism and Developmental Disabilities.

Assessment and instructional strategies for educating students with autism and other developmental and physical disabilities. Focuses on implementation and evaluation of instructional procedures for teaching a range of adaptive behaviors, such as self-care, and communication, social, and community living skills. Three lecture hours and eight hours of fieldwork a week for one semester. Required for students seeking special education certification. Prerequisite: Admission to the teacher preparation program and consent of the Office of Student Field Experiences.

#### SED 378T. Topics in Special Education.

Three lecture hours and three and one-half hours of fieldwork a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

#### Topic 1: Language-Minority Students in Special Education.

Prerequisite: Applied Learning and Development 322.

#### SED 379. Seminar in Special Education.

Specialized study in an identified area of interest in education of the exceptional child. Three lecture hours a week for one semester. May be repeated for credit. Prerequisite: Applied Learning and Development 322 and consent of the undergraduate adviser.

## **Cockrell School of Engineering**

Sharon L. Wood, PhD, PE, Dean Gerald E. Speitel Jr., PhD, PE, Associate Dean for Academic Affairs John G. Ekerdt, PhD, PE, Associate Dean for Research Christopher Higgins, Chief Development Officer Michelle G. Meyer, MEd, Assistant Dean for Engineering Student Services Wesley G. Queen, BBA, Assistant Dean for Business Affairs http://www.engr.utexas.edu/

## **General Information**

#### Mission

The mission of the Cockrell School of Engineering is to achieve excellence in undergraduate and graduate education, research, and public service. The school strives to provide an educational experience that inspires students to reach for the highest levels of intellectual attainment and personal growth throughout their lives, to provide a scholarly and professional environment that enables students and faculty members to make lasting contributions to the advancement of knowledge and the creative practice of engineering, to engage in service that enhances the public's understanding of technology and facilitates the use of technology for the betterment of society, and to lead the nation in providing equality of opportunity for engineering education.

Engineering education affords individuals the opportunity to prepare themselves for life in an era when human well-being depends more than ever before on the ability to apply technology for the benefit of society. It has become clear that in producing the goods and services demanded by an expanding population, we must consider the effects of technology on the environment. Solution of many of the problems faced by society today will involve a high level of technology.

Engineers are involved with all the devices and systems made by and for people—buildings and factories, transportation and communication systems, equipment for generating and distributing electrical energy, computers and electronic devices; indeed, all of the manufactured products we see around us. Engineers of diverse backgrounds working together and with other professionals have produced heart pumps, surgical lasers, robotics for manufacturing and construction, polymers, safer and more efficient nuclear reactors, advances in space research and in environmental protection, safe and attractive bridges, satellites and telecommunication systems, and small but powerful computers. Just as much of the technology being applied today has been developed within the past ten years, the solution of tomorrow's problems will require the development of new technology through engineering research.

In addition to its traditional function of giving men and women the opportunity to prepare for careers as professional engineers, the Cockrell School of Engineering also has a second function: providing the opportunity to acquire a technical background to students who plan to continue their education in areas such as business, public affairs, law, medicine, and scientific disciplines related to engineering. The engineering faculty willingly accepts its obligation to enhance cooperation between engineers and others working to improve the quality of life.

The school is organized into academic departments that offer a variety of degrees. Although there are distinct differences among the degree programs, they have much in common; all are based on a foundation of mathematics, natural sciences, and basic engineering subjects. Following the development of an adequate foundation during the first two years, an engineering student begins concentrated study in a particular area. During the senior year the student delves into practical engineering problems, developing skills in defining a problem, translating available information into equations that can be analyzed logically, creating additional information when necessary, and choosing a course of action that has a reasonable chance of producing the desired results.

The school seeks to give students the knowledge necessary to take advantage of opportunities in a number of areas. The engineer who begins a professional career immediately following graduation usually will find opportunity for a variety of responsible positions in industry and government. The first assignments usually are of a technical nature. Later, one may choose to become a technical specialist or to move into positions involving administration and management. Either choice can lead to a rewarding professional career.

Many engineering graduates elect to continue their education. Studies by the American Society for Engineering Education indicate that nearly 50 percent of all engineering graduates eventually earn a master's degree. Most do their graduate work in engineering, either in a professional program where advanced design techniques are emphasized or in a graduate school where the emphasis is on research. Others elect to enroll in graduate programs in other disciplines. The flexibility to accommodate a broad spectrum of educational objectives has been incorporated into the degree structure of the Cockrell School of Engineering through technical area options and electives that permit students to define programs of study that best suit their needs.

#### History

The Department of Engineering was established in 1884, an outgrowth of work in applied mathematics first offered in the Department of Literature, Science, and Arts. About 1920, the department became a college; in 2007, the college was renamed the Cockrell School of Engineering in honor of Ernest Cockrell Jr., an alumnus and benefactor of the University. The first degree in engineering, a Bachelor of Science with a major in civil engineering, was conferred in 1888. Civil engineering degrees have been conferred since 1894 and electrical engineering degrees since 1896.

Degrees in architecture were conferred in the College of Engineering from 1909 through 1951, when the School of Architecture became an autonomous division of the University. Degrees in chemical engineering have been conferred since 1916; degrees in mechanical engineering since 1919; degrees in architectural engineering since 1928; degrees in petroleum engineering since 1931; degrees in aeronautical engineering from 1943 to 1959 and in aerospace engineering since 1960; degrees in ceramic engineering from 1948 to 1961; degrees in meteorology from 1951 to 1963; degrees in geosystems engineering and hydrogeology, offered jointly with the Jackson School of Geosciences, since 1996; and undergraduate degrees in biomedical engineering beginning in 2002. A degree in engineering science was offered from 1960 until 1988.

#### Facilities

The Cockrell School occupies six buildings on the central campus, with a total of 1,340,000 square feet for classrooms, laboratories, and offices. The Nuclear Engineering Teaching Laboratory and a substantial number of other engineering research laboratory facilities are housed at the J. J. Pickle Research Campus, about six miles north of the main campus.

### **Research Organizations**

Faculty members and students of the Cockrell School of Engineering may participate in a wide variety of research projects conducted under the Bureau of Engineering Research. The bureau and its component research units are supported by federal, state, and industrial research contracts and grants that provide part-time employment for selected undergraduate and graduate students and for some faculty members. More than six hundred individual research projects are usually underway at any one time. In addition to providing students with experience in research methodology, these research projects enable faculty members to keep abreast of developments in their principal areas of interest.

Research units currently operating within the Bureau of Engineering Research are the Center for Aeromechanics Research; Center for Electromechanics; Center for Energy and Environmental Resources; Center for Engineering Education; Center for Mechanics of Solids, Structures, and Materials; Center for Petroleum and Geosystems Engineering; Center for Water and the Environment; Center for Space Research; Center for Transportation Research; Construction Industry Institute; Phil M. Ferguson Structural Engineering Laboratory; Microelectronics Research Center; Nanomanufacturing Systems for Mobile Computing and Mobile Energy Technologies Center; and the Wireless Networking and Communications Group.

The Nuclear Engineering Teaching Laboratory is an academic unit of the Cockrell School. Interdisciplinary research units operated cooperatively by the school and other colleges are the Energy Institute; Texas Materials Institute; the Center for Perceptual Systems; and the Institute for Computational Engineering and Sciences.

#### Libraries

Staff and collections of the Richard W. McKinney Engineering Library support teaching, learning, and research in all fields offered by the Cockrell School of Engineering. The library, located in the Engineering Education and Research Center (EER) 1.706, is a branch of the University Libraries. Library webpages link to materials, guides, and contact information.

Other units of the University Libraries include the Perry-Castañeda Library (social sciences and humanities), Mallet Chemistry Library, Kuehne Physics-Math-Astronomy Library, Life Science Library, Walter Geology Library, and Dell Medical School Library. The print and electronic collections of these and other library components form one of the largest academic libraries in the United States, with more than ten million volumes covering almost all fields of academic and scientific research.

Assistance with finding and using library resources is offered in person, by contacting individual members of the library staff, and through Ask a Librarian services.

#### **Engineering Development Office**

In 1955, the University of Texas System Board of Regents authorized establishment of the Engineering Foundation Advisory Council (renamed the Engineering Advisory Board in 2007) to promote academic excellence in engineering education. Since then, with the board's leadership, the Cockrell School of Engineering has received generous support from individuals and corporations to develop programs of excellence. This philanthropy supports academic and leadership programs for students, scholarships for undergraduate students, fellowships for graduate students, facility development, and faculty support in the forms of endowed chairs and professorships, fellowships, and innovations in teaching and research. The Cockrell School's development staff encourages gifts to the school through its Friends of Alec annual giving program, the establishment of endowments, estate planning, and the fostering of long-lasting relationships with alumni, friends, and corporate partners.

### Financial Assistance through the School

#### **Engineering Scholarship Program**

The Engineering Scholarship Program recognizes students in the Cockrell School of Engineering with scholarship awards based primarily on merit and leadership. To be considered for engineering scholarships, future students should complete the scholarship section of the University's ApplyTexas admission application by December 1, marking engineering as their first-choice major. Additionally, students should complete the Engineering Honors Program application, also due by December 1.

Current engineering students should complete the online engineering scholarship application by March 1 each year to be considered for scholarship awards from the Cockrell School and from their department for the following year. Information for scholarship recipients and links to additional scholarship resources is available at http:// www.engr.utexas.edu/undergraduate/scholarships.

### Student Services Engineering Student Services

Engineering Student Services (ESS) serves the University and the public by helping to recruit, retain, and graduate engineering students. The office aims to accomplish this mission by providing personal and responsive guidance and support throughout each student's University experience. The staff strives to provide a foundation for students to develop successful lives, careers, and long-term relationships with the Cockrell School of Engineering and The University of Texas at Austin.

The Assistant Dean for Engineering Student Services and the academic advisers represent the dean in all student matters. Academic advisers strive to build a strong foundation for academic and professional success for all engineering students, through personalized and responsive guidance throughout the four-year college experience. In addition, the ESS staff helps students, staff, and faculty navigate the policies and procedures of the Cockrell School and the University. Students may seek assistance in person in the Engineering Education and Research Center (EER) 2.848, by phone at (512) 471-4321, or by e-mail to studentservices@engr.utexas.edu. Engineering Student Services also provides information online at http://www.engr.utexas.edu/undergraduate/advising.

#### Advising

#### Academic Advising

There are several offices within the Cockrell School that work together to provide the engineering student with academic advising services. It is the engineering student's responsibility to be aware of these services and to take advantage of them. Faculty, departmental, and Engineering Student Services academic advisers are available throughout the year to discuss matters that affect the student's academic progress toward degree completion.

To facilitate movement through an academic program, each engineering student must be advised in his or her major department before registering for each semester or summer session. Each student should review his or her audit every semester through IDA, the University's Interactive Degree Audit system. The advising audit lists the courses remaining in the student's degree plan and the requirements the student has not yet fulfilled. It normally provides an accurate statement of requirements, but the student is responsible for knowing the exact requirements for the degree as stated in a catalog under which he or she is entitled to graduate. Another advising tool for the student is the G4 Web-based application, which shows undergraduate students that they can complete a bachelor's degree in engineering from the University in four years. It provides a visual representation of a student's degree plan, shows progress towards degree, and helps a student forecast the impact of course selection on time to graduation. Engineering students can access G4 online at http://www.engr.utexas.edu/features/7583-g4-schedulingfor-graduation.

#### **Counseling and Referral Services**

University counseling services are available from the Counseling and Mental Health Center, the Telephone Counseling Service and University Health Services. These offices are described in *General Information* (http://catalog.utexas.edu/general-information/student-services/ counseling-and-mental-health-center).

## Counselors in Academic Residence Program (CARE)

CARE is a program of the Counseling and Mental Health Center, which provides a licensed mental health professional to work with students who have been referred by faculty and staff. CARE counselors integrate in the college and provide support and consultation on mental health issues for advisers, faculty and dean's staff. The Engineering CARE counselor is located in the Engineering Student Services Office.

#### Student Organizations and Programs Engineering Student Life

#### Engineering Student Life (ESL) aims to enhance leadership abilities of all engineering students as a means to establish confidence in communication, teamwork and ethics skills needed for the professional world. ESL hosts professional development retreats like The LeaderShape Institute and Ramshorn Retreats, for individuals seeking personal enrichment, which also include enhanced leadership opportunities for advanced students. As the Cockrell School's primary

liaison to the over eighty-five engineering students of advanced students. As the occuten of noors primary liaison to the over eighty-five engineering student organizations, ESL provides officer training and advising for group leaders. To foster a welcoming and collaborative environment within the Cockrell School, ESL coordinates community building events like Gone to Engineering and Dean's Study Breaks. These professional development and social networking opportunities augment the student's college experience by allowing them to interact with other motivated students, provide venues to envision big goals, and practice partnering to accomplish complex projects.

Additional information about Engineering Student Life and engineering student organizations is available in person in the Engineering Education and Research Center (EER) 2.848, online at http://www.engr.utexas.edu/studentlife, by phone at (512) 232-5778, and by email at studentlife@engr.utexas.edu.

#### Equal Opportunity in Engineering Program

The Equal Opportunity in Engineering (EOE) Program invites students to become part of an exciting community that focuses on academic success and personal growth. EOE initiatives such as the Fall Kick-Off, First-Year Interest Groups (FIGs), and Engineering Peer Leaders help students establish a strong academic foundation and promote the formation of a peer support network. In addition, EOE provides students with access to tutoring, undergraduate research opportunities through the Texas Research Experience (TREX) program, and professional development workshops. In partnership with Pi Sigma Pi Minority Academic Engineering Society, the National Society of Black Engineers, and the Society of Hispanic Professional Engineers, the EOE Program builds a network that makes it easy to meet other engineering students, form study groups, and develop friendships that last well after graduation.

The Cockrell School established the EOE Program in 1970 to promote the recruitment and academic development of African American, Hispanic, and Native American students interested in pursuing careers in engineering. Since that time, EOE has expanded its goals and now seeks to increase the diversity of its student body by supporting students who come from historically underrepresented population groups in Texas or who have backgrounds or experiences that will contribute to the overall diversity of the Cockrell School of Engineering.

Additional information about the EOE Program is available in person in the Engineering Education and Research Center (EER) 2.608, online at http://www.engr.utexas.edu/eoe/, by phone at (512) 471-5953, and by e-mail to eoe@engr.utexas.edu.

#### Women in Engineering Program

The Women in Engineering Program (WEP) has a goal to increase the overall percentage of women enrolled in and graduating from the Cockrell School of Engineering. WEP connects students, educators, and professionals to the world of engineering through recruitment initiatives, supportive structures, and educational services to promote the success and advancement of women in engineering.

WEP's First-Year Initiative (FYI) provides academic and peer support to connect first-year students to the engineering community. The Women in their Second Year of Engineering (WISE) and Consider Every Option (CEO) programs and workshops provide career exploration opportunities to help second-year students and beyond discover possibilities and make informed decisions for the future. Graduates Linked with Undergraduates in Engineering (GLUE) gives students opportunities to gain practical research experience, and WEP leadership and career development seminars help prepare students for leadership roles in the engineering profession.

Additional information about WEP is available in person in the Engineering Education and Research Center (EER) 2.608, online at http:// www.engr.utexas.edu/wep/; by phone at (512) 471-5650; and by e-mail at wep@engr.utexas.edu.

#### **Career Services**

The Engineering Career Assistance Center (ECAC) helps engineering students with job search and career planning through counseling, workshops, and campus recruiting and interviews. Engineering students should register with ECAC beginning in August each academic year to receive full benefit of the center's services.

ECAC offers individual career counseling services to engineering students on a walk-in basis and by appointment. Topics addressed in individual counseling sessions and workshops include career planning and exploration, résumé writing, interviews, site visits, and evaluating job offers.

ECAC hosts interviews in its 27 interview rooms throughout the fall and spring recruiting seasons. Employers seek graduating students, co-op students, and summer interns in all engineering disciplines.

ECAC encourages engineering students to visit our office in person in the Engineering Education and Research Center (EER) 2.604. Engineering students can also visit ECAC online at http://www.engr.utexas.edu/ecac/ and reach out to ECAC via e-mail at ecac@engr.utexas.edu or phone at (512) 471-1915.

#### **Cooperative Engineering Education Program**

The Cooperative Engineering Education (Co-op) Program is an academic program that allows undergraduate students to obtain full-time engineering experience before they graduate. Students gain work experience directly related to their field of engineering by alternating semesters of full-time campus study with training in industry.

To realize the full academic and professional value of the Co-op Program, students complete either two or three semesters with the same employer in a cooperative engineering position. Students receive two or three hours of letter-grade credit that may be applied toward the engineering degree. Students should apply for the Co-op Program at least one semester before planning to begin a co-op work term.

Students may apply for the first work term after completing 28 semester hours of basic sequence coursework, which includes eight hours of physics, eight hours of calculus, and at least one course in the selected engineering major. Students must have an overall University grade point average (GPA) of at least 2.50, a GPA in the major area of study of at least 2.00, and at least twelve semester hours of degree-applicable coursework left to complete after the final co-op term. Students may apply for the program after one semester at the University.

Engineering students can visit the Co-op Program in EER or online at http://www.engr.utexas.edu/ecac/coop/. Engineering students can reach the Co-op Program via e-mail at co-op@engr.utexas.edu, or by phone at (512) 471-5954.

#### **UTeach-Engineering**

UTeach-Engineering is an innovative program that prepares engineering students to teach mathematics, physical science, and engineering to students in grades eight through twelve. The program, a collaboration between the Cockrell School of Engineering, the College of Natural Sciences, the College of Education, and area school districts, seeks to attract interested students to explore teaching in conjunction with their undergraduate experience. Upon completing the program, students graduate with a bachelor's degree and are recommended for a secondary school teaching certificate. The UTeach-Engineering program invites students to explore their interest in teaching as early as the freshman year.

Key features of the program include field experience, mentorship, seminar instruction, cohort support and innovative use of technology. UTeach-Engineering students gain experience in public school classrooms as they teach progressively longer lessons under the guidance of a mentor teacher. By working with some of Texas's most respected secondary school teachers, students quickly learn whether they are suited for the teaching profession.

More information about UTeach-Engineering is available online at http:// www.uteachengineering.org/

#### **Study Abroad**

International Engineering Education offers programs designed for Longhorn Engineers so they can take study abroad first-hand without delaying graduation. Participants may apply their scholarships and financial aid loans to all necessary costs, including tuition and fees, required travel, insurance and living expenses. Most programs do not have any foreign language requirements so students may take engineering courses while also exploring global innovation, entrepreneurship, and service through immersion in industry, laboratories and communities abroad.

As one of the best engineering schools in the country, the Cockrell School of Engineering prides itself in providing international engineering education opportunities to prepare its students to become global leaders and innovators. For this generation of engineers, developing an international perspective and global leadership skills is fundamental. The engineering profession has a central role in the globalized marketplace. Industry leaders and government experts urge engineering students to immerse themselves in other cultures to learn to effectively work and successfully compete but also to collaborate with other countries on special projects, products, and solutions for the global challenges of the twenty-first century. Engineers lead the world in developing and managing high technologies and companies that improve and affect our daily quality of life, health, security, education, economy, and world peace.

We offer a variety of programs for all majors and class levels so that every interested student can find an opportunity. Students may study abroad as early as the end of their first year. Maymesters, typically starting at the end of May, offer one course abroad that is taught by outstanding Cockrell School of Engineering faculty. They offer invaluable faculty mentorship and academic inspiration to students throughout their career. Most short summer programs are between four to 8 weeks and offered from the end of May to the beginning of August. They may offer more than one course. The costs of these programs vary depending on location, duration and activities.

Advanced sophomores, juniors and fall semester seniors may participate in bilateral exchanges with selected partner universities abroad. Exchange students immerse themselves fully in another academic and cultural environment for at least four months during the fall or the spring or both semesters. They take a full load of courses from the host university's regular university offerings. The courses are usually offered in English or, if the student is sufficiently proficient, they may also study in courses offered in the host country's language. Students pay the same tuition and fees that they pay to attend The University of Texas at Austin. The other living expenses vary depending on the location.

Apart from the traditional summer study abroad, we also offer engineering students other types of international programs that provide very valuable experiential learning. These are usually in the summer and include industry and research immersion internships. Projects with Underserved Communities (PUC) offers a fall and spring engineering course sequence that focuses on project development and project management to prepare students for a short summer implementation phase at a community abroad.

All engineering students are highly encouraged to participate in at least one global learning experience. The International Engineering Education office holds frequent information session sessions and one-on-one advising to help students plan how to globalize their education and select a program that best suits their interests. For more information, please visit www.engr.utexas.edu/undergraduate/iee.

## **Admission and Registration**

#### Admission

Admission and readmission of undergraduate students to the University is the responsibility of the director of admissions. All students who wish to major in engineering must be admitted to the University according to the procedures given in *General Information* (http://catalog.utexas.edu/ general-information/admission/undergraduate-admission).

Information is available from The University of Texas at Austin, Engineering Education and Research Center (EER), Cockrell School of Engineering, 2501 Speedway, C2108, Austin TX 78712. The telephone number is (512) 471-4321. Students who have questions about the requirements of a specific degree plan should contact the appropriate departmental advising office. Additional information about academic advising can be found at http://www.engr.utexas.edu/undergraduate/advising.

#### **Freshman Admission**

Freshman applicants seeking admission to the Cockrell School must meet the calculus readiness requirement by the official admissions application deadline. More information about calculus readiness is available at http://www.engr.utexas.edu/undergraduate/admission/ calculus/.

Applicants to the Cockrell School should use the online application at http://www.applytexas.org/ and select engineering as a first-choice major. When selecting a second-choice major, freshman applicants may choose from one of the many other majors offered at the University, and choose a second major that aligns with their interests.

#### **Transfer Admission**

#### Internal Transfer

## Internal transfer within the Cockrell School, *first-semester engineering student*

A first-semester engineering student who wants to transfer to another major within the Cockrell School of Engineering must submit an application by the December 15 deadline for spring admission. Students who are applying during their first semester enrolled must meet the following requirements to be eligible for consideration:

- 1. Completion of at least 14 semester hours of coursework in residence.
- 2. Successful completion of Mathematics 408C, for a letter grade, or a subsequent calculus course, taken in residence.
- 3. Successful completion of a second technical course in residence for a letter grade that counts toward the engineering degree. Technical courses include courses offered in math, physics, chemistry, biology, geology, or engineering.

## Internal transfer within the Cockrell School, after first semester

Engineering students who want to transfer to another major within the Cockrell School must submit an application by the May 15 deadline for summer/fall admission and the December 15 deadline for spring admission. Engineering students who are applying after completing at least one semester must meet the following requirements to be eligible for consideration:

- 1. Completion of at least 28 semester hours of coursework in residence at the University.
- 2. A cumulative in-residence grade point average of at least 3.00.
- 3. Successful completion of Mathematics 408D, Physics 303K, and 103M for a letter grade or their equivalents.
- 4. Successful completion of a minimum of four technical courses in residence for a letter grade that count toward the engineering degree, including the mathematics and physics coursework listed above. Technical courses include courses offered in math, physics, chemistry, biology, geology, or engineering.

## Internal transfer from another division of the University

A student may transfer to the Cockrell School of Engineering from another division of the University in accordance with the regulations given in *General Information* (http://catalog.utexas.edu/generalinformation/registration-tuition-and-fees/transfer-from-one-divisionto-another-within-the-university). All students must submit an internal transfer application by the May 15 deadline for summer/fall admission.

Internal transfer applicants must meet the following requirements to be eligible for consideration:

- 1. Completion of at least 28 semester hours of coursework in residence at the University.
- 2. A cumulative in-residence grade point average of at least 3.00.
- 3. Successful completion of Mathematics 408D, Physics 303K, and 103M for a letter grade or their equivalents.
- 4. Successful completion of a minimum of four technical courses in residence for a letter grade that count toward the engineering degree, including the mathematics and physics coursework listed above. Technical courses include courses offered in math, physics, chemistry, biology, geology, or engineering.

Additional information for all internal transfer applicants:

- Only currently enrolled students may apply.
- Students may apply during the semester they are completing the minimum requirements to be eligible for consideration.
- Application forms are available online at http:// www.engr.utexas.edu/undergraduate/admissions/changeofmajor.
- Admission to all engineering majors is offered as space is available to the students who are best qualified. For equally qualified applicants, preference is given to the student who has completed more of the required technical courses for the requested major.

#### **External Transfer**

External transfer applicants will be required to meet the following minimum criteria to be considered for admission to an engineering major.

- Transfer credit for Mathematics 408L, 408M, or 408D
- Transfer credit for Physics 303K and 103M
- Transfer credit for at least four technical courses, including the mathematics and physics coursework listed above. Technical courses include courses offered math, physics, chemistry, biology, geology, computer science, or engineering.

#### **Guidelines for Transfer Students**

- 1. Students who wish to transfer to the University from another college or university must apply to the Office of Admissions as described in *General Information* (http://catalog.utexas.edu/general-information/admission/undergraduate-admission/#transferadmissiontext). All transfer applicants must submit transcripts of all college and high school coursework.
- Only courses listed in the student's engineering degree program, or equivalent courses accepted by the department chair and approved by the dean, may be counted toward an engineering degree. A course may therefore be accepted for transfer credit but not be applicable toward an engineering degree.
- 3. Courses that are common to all degree programs in the Cockrell School are listed in Requirements Included in All Engineering Degree Plans (p. 192). These may be taken at any school offering courses acceptable for transfer to the University.
- 4. Completion of sequences of technical courses in the major area sometimes requires five or more semesters. Therefore, most transfer students should anticipate a minimum of five semesters in residence at the University.

#### Registration

General Information (http://catalog.utexas.edu/general-information/ registration-tuition-and-fees) gives information about registration, adding and dropping courses, transfer from one division of the University to another, and auditing a course. The *Course Schedule* (http:// registrar.utexas.edu/schedules), published online before registration each semester and summer session, includes registration instructions, advising locations, and the times, places, and instructors of classes.

To register for a course, a student must fulfill the prerequisite given in the catalog or course schedule. If the student has not fulfilled the prerequisite, he or she must obtain the approval of the department offering the course before registering for it.

#### **Concurrent Enrollment**

Concurrent enrollment refers to taking courses through The University of Texas at Austin Extension (UEX) program, or taking courses at another university or a community college. An engineering student must have the approval of the dean for concurrent enrollment. Application for this approval should be made online at http://www.engr.utexas.edu/ undergraduate/forms. A student may not enroll concurrently in any course counted toward the degree in the semester he or she will be graduating. More information about the approval process is available in the Engineering Student Services located in the Engineering Education Research Center (EER), by email at studentservices@engr.utexas.edu (student-affairs@engr.utexas.edu); or by phone at (512) 471-4321.

### Academic Policies and Procedures

## Grade Point Average for Academic Decisions

In the Cockrell School of Engineering, the grade point average used in all academic decisions is the average of grades the student has earned in residence in courses applicable to the degree. Academic decisions are decisions about engineering probation, engineering dismissal, internal transfer (change of major), admission to the Engineering Honors Program, designation as an Engineering Scholar, eligibility for graduation, and eligibility for graduation with University Honors.

#### **Quantity of Work Rule**

## Maximum Number of Hours in the Long Session

As used in items 1 and 2 below, "coursework" includes correspondence courses, extension courses, distance education courses, nonrequired electives, physical activity courses, and courses for which the student is registered concurrently at another institution.

- An engineering student may not register for more than 17 semester hours of coursework without an approved application to do so. Application is made online at http://www.engr.utexas.edu/ undergraduate/forms/.
- 2. No student may register for more than 21 semester hours of coursework during any long-session semester.

#### **Rules for the Summer Session**

A student may not receive credit for more than 14 semester hours during a 12-week summer session or for more than eight semester hours in a six-week summer term. These limits apply whether the courses are taken at the University or another institution. For more information about the quantity of work allowed in the summer, see *General Information* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/quantity-of-work-rule).

#### **Repetition of a Course**

An undergraduate in the Cockrell School may not enroll in any lower division courses in engineering, geology or natural sciences required by the engineering degree plan more than twice. A symbol of *Q* or *W* counts as an enrollment unless it is recognized as nonacademic by the dean's office.

To request permission to enroll in a course for a third or more attempt a student must submit a written appeal at https://utdirect.utexas.edu/ link2/appeal\_entry.WBX. A student may receive departmental adviser approval to enroll in a course a third or more times only if the student has a substantiated nonacademic reason for not successfully completing the course in earlier attempts. Documentation may be required by the departmental adviser to support the substantiated nonacademic reason. If the student is denied approval to enroll in a required course, he or she will be placed in the undeclared major code and must consider other eligible degree options.

A student who is denied approval to repeat a course in residence at the University will also be denied approval to complete the course by transfer, extension, correspondence, distance education, or credit by examination and then count it toward the degree.

A student in the Cockrell School may not repeat for a letter grade a course in which he or she has earned a grade of *C*- or better.

#### Attendance

Engineering students are expected to attend all meetings of the classes for which they are registered. Students who fail to attend class regularly are inviting scholastic difficulty. In some courses, instructors may have special attendance requirements; these should be made known to students during the first week of classes. With the approval of the dean, a student may be dropped from a course with a grade of *F* for repeated unexcused absences.

#### **Portable Computing Devices**

All degree programs in the Cockrell School have specific expectations regarding portable computing devices. For more information, please see the catalog sections for these programs.

#### **Academic Standards**

In addition to the scholastic standards described in *General Information* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/scholastic-probation-and-dismissal), the Cockrell School imposes the following academic standards. Students who fail to meet the standards stated in *General Information* are placed on "scholastic probation" by the University. The probationary status given to those who fail to meet the following school standards is "engineering probation."

In cases with extenuating circumstances, the student may appeal to the dean for a waiver of any of the following requirements.

A student is placed on engineering probation under the following circumstances:

 If his or her grade point average in courses in the major area of study taken in residence falls below 2.00. The "major area of study" includes all courses in the student's discipline and required under the student's engineering degree plan. For specific degree plans, there are additional courses included in the "major area of study":

- For architectural and civil engineering majors, the major area includes all courses in both architectural engineering and civil engineering;
- For environmental engineering majors, the major area includes all courses in architectural engineering, civil engineering and environmental engineering;
- For aerospace engineering majors, the major area includes all courses in both aerospace engineering and engineering mechanics;
- For computational engineering majors, the major area includes all courses in computational engineering, aerospace engineering and engineering mechanics
- For geosystems engineering and hydrogeology majors, the major area includes all courses in both geological sciences and petroleum and geosystems engineering.
- If the student's grade point average in required technical courses taken in residence falls below 2.00. "Required technical courses" are courses taken in the Cockrell School, the College of Natural Sciences, or the Jackson School of Geosciences and required under the student's engineering degree plan; they include approved technical elective courses.

Grades received at the University in all courses in the major area, including grades in courses that have been repeated, are included in computing the student's grade point average.

A student on engineering probation will be removed from probation at the end of a long-session semester or summer session if the student is no longer subject to engineering probation under either of the criteria above.

After being placed on engineering probation, a student must be removed from probation within the next two long-session semesters in which he or she is registered. A student who fails to be removed from engineering probation within this time will be placed on engineering dismissal from the school.

A student seeking to reenter the school after having been scholastically dismissed from the University must enroll as an undeclared major unless there is a reasonable likelihood that the student can complete the degree plan under which he or she last registered. A student seeking to reenter the school after having been dismissed from engineering must enroll as an undeclared major. Students who are undeclared majors may not enroll in engineering courses.

Any student having academic difficulty should discuss his or her status with an academic adviser in the Engineering Student Services Office. Call (512) 471-4321 to set up an appointment with an academic adviser.

#### **Pass/Fail Option**

All courses required for all engineering degrees must be taken for a letter grade unless the course is offered only on the pass/fail basis or if it meets the requirements for the Cockrell School of Engineering's semester exchange grading policy for study abroad. A student may elect to take courses that do not count toward the degree or are being taken to remove a deficiency on the pass/fail basis rather than for a letter grade. To elect the pass/fail system of grading:

- 1. The student must have received at least 30 hours of college credit before registering for any course on the pass/fail basis, unless the course is offered only on the pass/fail basis.
- The student may take no more than two courses a semester on the pass/fail basis.
- 3. The student may take up to five one-semester courses, including correspondence courses, on the pass/fail basis.

4. The student must submit an application no later than the deadline given in the academic calendar at https://utdirect.utexas.edu/engine/pass\_fail/index.WBX.

For information on how to receive credit by examination, see *General Information* (http://catalog.utexas.edu/general-information/ academic-policies-and-procedures/testing-and-evaluation-services/ #courseplacementandcreditbyexaminationtext).

## Grade Policy for Semester Exchange (Study Abroad) Students

With permission of the undergraduate advise in their department, engineering students may elect to place up to four exchange courses on their records with a *CR*, rather than with a The University of Texas at Austin letter grade. The following restrictions apply:

- 1. Only courses completed on a semester exchange at a Cockrell School of Engineering partner institution qualify.
- 2. Students must choose the Pass/Fail option by the usual University mid-semester deadline given in the academic calendar and must have prior permission of their undergraduate adviser before doing so. If the exchange university does not follow the same academic calendar at The University of Texas at Austin, the student must make this request before 60% of the course completion (usually about nine weeks from the start of class).
- 3. The corresponding course in the The University of Texas at Austin degree plan will determine the minimum grade requirement to obtain the *CR* grade (i.e., if the University course required a *C* or better, the student must have earned the equivalent of *C* or better on the exchange course to receive a *CR*; in the absence of a specified minimum grade requirement, the standard is an equivalent of *D* or better.
- 4. Courses in the engineering degree program taken on exchange programs with the *CR* grade option may be counted toward any requirements for the degree except courses being applied toward the 42-hour, University Core Curriculum requirements.
- 5. No matter how many exchange courses a student takes, no more than two exchange courses per semester and no more than four total exchange courses with the *CR* grade can be applied toward the degree.
- 6. Once a course is place on the The University of Texas at Austin record, the grade designation may not be changed.

#### Honors

#### **University Honors**

The designation University Honors, awarded at the end of each longsession semester, gives official recognition and commendation to students whose grades for the semester indicate distinguished academic accomplishment. Both the quality and the quantity of work done are considered. Criteria for University Honors are given in *General Information* (http://catalog.utexas.edu/general-information/academicpolicies-and-procedures/honors/#universityhonorstext).

#### **Graduation with University Honors**

Students who, upon graduation, have demonstrated outstanding academic achievement are eligible to graduate with University Honors. Criteria for graduation with University Honors are given in *General Information* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/honors/#graduationwithuniversityhonorstext).

#### **Cockrell School Honors Program**

The Cockrell School of Engineering offers a select group of students the opportunity to participate in the Engineering Honors Program (EHP), a non-curriculum based program designed to enhance the undergraduate experience outside the classroom. Participants gain access to scholarships for first-year students, honors housing, faculty mentors and community building events hosted by the EHP.

When submitting an admission application to the University through ApplyTexas, incoming first-year students should mark engineering as their first-choice major and indicate their intent to apply for honors. Students will receive additional instructions to complete the EHP application separately. Both the admission application and the EHP application are due December 1.

The Cockrell School also sends current students invitations to apply for the EHP after they complete 24 hours in residence and rank in the top 10 percent of their class and major. Eligible students must have at least 60 hours remaining in their degree program in order to receive an invitation to apply.

To remain in the EHP, students must maintain an in-residence grade point average of at least 3.50. The grade point average is evaluated each year after grades for the spring and summer semester have been awarded.

An EHP student who completes an optional undergraduate honors thesis will receive special honors designation on his or her transcript and is recognized during the graduation ceremony. Additional information about the honors thesis and the EHP is available at http:// www.engr.utexas.edu/undergraduate/services/honors.

#### **Engineering Scholars**

Engineering Scholars are designated each spring semester from the sophomore, junior, and senior classes. To be eligible, a student must be enrolled in the Cockrell School, must have completed at least 24 semester hours of coursework in residence while enrolled in the school, must have a grade point average that places him or her in the top 5 percent of the class, be of good character, and show promise of continued success in engineering. The grade point average used to determine the student's class rank includes only courses that the student has completed in residence and that are applicable to the degree.

#### **Professional and Honor Societies**

Professional student organizations play an important role in the life of an engineering student. Many of these are student branches of national professional engineering organizations that endeavor to advance the profession of engineering by education, service, professional development, publication, and support of meetings, activities, and conferences. In addition to a variety of professional development and social activities, engineering student organizations frequently support projects that aid students and benefit the Cockrell School of Engineering, the University, and the community.

Honor societies are also an important part of the Cockrell School student community. Honor societies admit students who have established outstanding scholastic records and have demonstrated desirable character and leadership traits. The engineering honor societies are Beta Mu Epsilon (biomedical engineering); Chi Epsilon (civil engineering); Eta Kappa Nu (electrical and computer engineering); Omega Chi Epsilon (chemical engineering); Phi Alpha Epsilon (architectural engineering); Pi Epsilon Tau (petroleum and geosystems engineering); Pi Tau Sigma (mechanical engineering); and Sigma Gamma Tau (aerospace engineering); Tau Beta Pi selects top students from all engineering disciplines. Kappa Theta Epsilon is the cooperative engineering education honor society for all engineering majors who participate in the cooperative engineering program.

The Student Engineering Council is the governing body representing all undergraduate engineering students. Representatives to the council are elected by the professional student organizations and honor societies in the Cockrell School; members-at-large are elected annually. The Graduate Engineering Council is the governing body representing all graduate engineering students.

Engineering student organizations and honor societies are overseen by Engineering Student Life. A complete list of engineering societies is available at http://www.engr.utexas.edu/studentlife/learn/.

## Graduation

#### **Special Requirements of the School**

All University students must have a grade point average of at least 2.00 to graduate. Students in the Cockrell School must also have an inresidence grade point average of at least 2.00 in all courses applicable to the degree, the major area of study and required technical courses. "Major area of study" and "required technical courses" are defined in the section "Academic Standards."

A candidate for a degree in engineering must be registered in the Cockrell School either in residence or in absentia the semester or summer session the degree is to be awarded. No later than the date given in the official academic calendar, the candidate must complete an online application form for graduation or graduation in absentia at http:// www.engr.utexas.edu/graduation/.

All individual degree programs must include at least 48 semester hours of engineering coursework.

#### **Residence Rules**

All University students must complete in residence at least 60 semester hours of the coursework counted toward the degree. In the Cockrell School, 30 of these 60 hours must be in the major field or in a field closely related to the major as approved by the major department and the dean.

At least the last 24 hours of technical coursework counted toward an engineering degree must be taken while the student is registered as an undergraduate engineering major at the University. A student seeking an exception to this requirement must obtain written approval in advance from the dean. Information about the petition process is available in the Engineering Student Services Office, located in the Engineering Education and Research Center (EER).

#### **Degree Audit**

Each student should review his or her degree audit every semester through IDA, the University's Interactive Degree Audit system. The degree audit normally provides an accurate statement of requirements, but the student is responsible for knowing the requirements for the degree as stated in a catalog under which he or she is eligible to graduate and for registering so as to fulfill these requirements; see the rules on graduation under a particular catalog (p. 21). Since the student is responsible for correct registration toward completion of the degree program, he or she should first check the requirements with their department Undergraduate Advising Office and then seek an official ruling in the Engineering Student Services Office before registering if in doubt about any requirement. Avoidance of errors is the main purpose of the degree audit, but it remains the responsibility of the student to fulfill all catalog requirements.

### **Applying for Graduation**

Students must apply for graduation the first semester they are eligible to graduate. A student is eligible to graduate if their engineering degree audit is 100% complete. If a student fails to submit an application for degree by the deadline given in the academic calendar, an application for degree may be submitted by his or her academic Dean or designee. An application submitted under these circumstances cannot be canceled without a successful appeal to the Office of the Provost (Student Success Initiatives). Please refer to the Graduation Appeal Application for further information.

Please contact the Engineering Student Services Office, located in the Engineering Education and Research Center (EER) or by phone at (512) 471-4321 for further questions.

#### **Nonresidence Coursework**

A student in his or her final semester may not enroll concurrently at another institution in any course, including a distance education course, to be counted toward the degree. In the final semester, the student may also not enroll by extension or correspondence in coursework to be counted toward the degree. All transfer, extension, and correspondence coursework must be added to the student's official record before his or her last semester.

#### Second Degrees

A student who completes a bachelor's degree in engineering may receive a second bachelor's degree in a second engineering discipline if the student meets all the requirements of the second degree that he or she did not meet in completing the first degree. This process is subject to approval by the Engineering Student Services Office. No student may receive two bachelor's degrees in the same discipline of engineering, even if the technical area options are different. For example, a student may receive the degree of Bachelor of Science in Chemical Engineering and that of Bachelor of Science in Mechanical Engineering but may not receive two Bachelor of Science in Chemical Engineering degrees. A student may not receive bachelor's degrees in both architectural engineering and civil engineering.

#### Commencement

In addition to the University commencement ceremony held each spring, the Cockrell School holds a commencement ceremony in May. Degree candidates intending to graduate in the current academic year and who have applied to participate are eligible to attend the May commencement ceremony. Information about graduation and commencement is available at http://www.engr.utexas.edu/graduation.

#### **Registration as a Professional Engineer**

The practice of engineering has a profound effect on public health, safety, and welfare. Therefore, the commitment to the public good through the licensing or registration provisions available in all states and many foreign countries is an important step in the professional development of an engineer. Becoming licensed in Texas as a professional engineer requires graduation from an approved curriculum in engineering, passage of the examination requirements, and a specific record of an additional four years or more of active practice in engineering work indicating that the applicant is competent to be placed in responsible charge of such work. Additional requirements include good character and reputation. Engineering students are encouraged to take the Fundamentals of Engineering examination during their last long-session semester and to seek certification as an "engineer in training."

For additional information, contact the Texas Board of Professional Engineers or the equivalent agency in another state.

### **Degrees and Programs**

To satisfy the course requirements for an engineering degree, a student must earn credit for all of the courses listed in the curriculum for that degree.

All University curricula leading to bachelor's degrees in engineering are accredited by the Engineering Accreditation Commission of ABET, www.abet.org (http://www.abet.org). ABET sets minimum standards for engineering education, defined in terms of curriculum content, the quality of the faculty, and the adequacy of facilities. Graduation from an accredited program is an advantage when applying for membership in a professional society or for registration as a professional engineer.

#### **Dual Degree Programs**

#### **Engineering/Plan II Honors Program**

A limited number of students whose high school class standing and admission test scores indicate strong academic potential and motivation may pursue a curriculum leading to both a bachelor's degree in engineering and the Bachelor of Arts, Plan II. This dual degree option, offered jointly by the Cockrell School and the Plan II Honors Program of the College of Liberal Arts, provides the student with challenging liberal arts courses while he or she also pursues a professional degree in engineering. Admission to this program requires at least two separate applications: one to the University and one to the Plan II Honors Program. Students should contact both the Cockrell School Engineering Student Services Office, located in the Engineering Education and Research Center (EER), and the Plan II office, located in the Liberal Arts Building (CLA), for more information on applications and early deadlines.

#### Architectural Engineering/Architecture

A program that leads to both the Bachelor of Science in Architectural Engineering degree and the Bachelor of Architecture degree is available to qualified students. The program combines the course requirements of both degrees and requires six years for completion. Students who wish to pursue both degrees must apply for admission to the School of Architecture according to the procedures and deadlines established by the school. The program is described in Bachelor of Architecture/ Bachelor of Science in Architectural Engineering Dual Degree Program (p. 37); additional information is available from the undergraduate adviser for architectural engineering.

#### **Simultaneous Majors**

An engineering student may pursue two majors simultaneously. The student must follow all procedures and meet all requirements associated with both majors. An engineering student may not pursue two engineering majors simultaneously.

The simultaneous major option is available only to undergraduates who have been admitted to both degree programs.

#### **Technical Area Options**

Several engineering degree programs require a student to select a "technical area option" and to complete a specified number of courses in that area. Other degree programs do not require a student to specify a particular option but allow the student to choose courses either within an area of specialty or more broadly across technical areas. Although most options are designed to help the student develop greater competence in a particular aspect of the major, others permit the student to develop background knowledge in areas outside the major. In many cases, students who elect the latter options intend to continue their education in professional or graduate school; these options are particularly appropriate for students who plan to work in those interdisciplinary areas where the creation of new technology through research and development is very important.

#### **Preparation for Professional School**

Technical area options also allow the student to fulfill the special course requirements for admission to professional schools. For more information, students should consult an adviser who is familiar with the admission requirements of the professional program in which the student is interested.

#### **Medical School**

A properly constructed program in engineering provides excellent preparation for entering medical school. The engineer's strong background in mathematics and natural science-combined with a knowledge of such subjects as applied mechanics, fluid dynamics, heat transfer, thermodynamics, chemical kinetics, diffusion, and electricity and magnetism-enhance the mastery of many aspects of medical science. An engineering background is also useful to those who develop and use new instruments for detecting and monitoring medical abnormalities. The engineering/premedical programs described in this catalog usually afford opportunities to pursue alternative vocations for those who do not enter medical school. Students who intend to apply for admission to a medical school should contact the University's Health Professions Office for information about admission requirements and application and test deadlines.

#### **Dental School**

Much of the information above about medical school applies also to dental school. All applicants must take the Dental Admission Test. Certain courses not taken by all engineers are also required, but these vary markedly from school to school. Students who are interested in dentistry can obtain specific information from the University's Health Professions Office.

#### Law School

Each year a few graduates, representing all engineering disciplines, elect to enter law school, where they find their training in careful and objective analysis is a distinct asset. Many of these students are preparing for careers in patent or corporate law that will enable them to draw on their combined knowledge of engineering and law. Others may not plan to use their engineering knowledge directly, but they still find that the discipline in logical reasoning acquired in an engineering education provides excellent preparation for the study of law. Students interested in admission to the law school of the University should consult the *Law School Catalog* (http://registrar.utexas.edu/catalogs/law-school). Students interested in pursuing law school outside of the University may utilize pre-law services of the Liberal Arts Career Service Center. In addition, the Engineering Career Assistance Center (ECAC) provides pre-law advising.

#### **Graduate Study in Business**

Since many engineering graduates advance rapidly into positions of administrative responsibility, it is not surprising that they often elect to do graduate work in the area of business administration. In addition to an understanding of the technical aspects of manufacturing, the engineer has the facility with mathematics to master the quantitative methods of modern business administration.

Requirements for admission to the University's graduate business programs are outlined in the *Graduate Catalog* (http://catalog.utexas.edu/ graduate/admission-registration). Many engineering degree programs offer technical area options that include business and management courses. These can be used with advantage by students who plan to do graduate-level work in business. Students interested in pursuing a graduate business program outside of the University may utilize the Engineering Career Assistance Center (ECAC) for career advising.

#### **ABET Criteria**

To be accredited by the Engineering Accreditation Commission of ABET, a degree plan of the Cockrell School must include the following:

- 1. One year of a combination of college level mathematics and basic sciences (some with experimental experience) appropriate to the discipline. Basic sciences are defined as biological, chemical, and physical sciences.
- 2. One and one-half years of engineering topics, consisting of engineering sciences and engineering design appropriate to the student's field of study. The engineering sciences have their roots in mathematics and basic sciences but carry knowledge further toward creative application. These studies provide a bridge between mathematics and basic sciences on the one hand and engineering practice on the other. Engineering design is the process of devising a system, component, or process to meet desired needs. It is a decision-making process (often iterative), in which the basic sciences, mathematics, and the engineering sciences are applied to convert resources optimally to meet these stated needs.
- 3. A general education component that complements the technical content of the curriculum and is consistent with the program and institution objectives.

Students must be prepared for engineering practice through a curriculum culminating in a major design experience based on the knowledge and skills acquired in earlier course work and incorporating appropriate engineering standards and multiple realistic constraints.

Here, one year is defined as either 32 semester hours (or equivalent), or one-fourth of the total credits required for graduation, whichever is lesser.

#### Liberal Education of Engineers

Each student must complete the University's Core Curriculum (http:// catalog.utexas.edu/general-information/academic-policies-andprocedures/core-curriculum). The core curriculum includes the firstyear signature course and courses in English composition, American and Texas government, American history, mathematics, science and technology, visual and performing arts, humanities, and social and behavioral sciences. It must be an integral part of all engineering degree programs, so that engineering graduates will be aware of their social responsibilities and the effects of technology on society. The University of Texas at Austin believes every undergraduate should be exposed to a set of skills and experiences in preparation for a complex world. To this end, all undergraduates at The University of Texas at Austin are required to earn flags: courses that include a substantial focus on cultural diversity in the U.S., ethics, global cultures, independent inquiry, quantitative reasoning, and writing.

With the appropriate selection of courses, the University's Core Curriculum, flags, and ABET general education requirements can be satisfied simultaneously.

#### Social and Behavioral Sciences Requirement

As part of the University's Core Curriculum, each student must complete three semester hours of coursework in social and behavioral sciences. Additionally, the Core Curriculum social and behavioral science course may be satisfied simultaneously for flag requirement(s) as well as coursework in a potential minor and certificate program.

#### Visual and Performing Arts Requirement

As part of the University's Core Curriculum, each student must complete three semester hours of coursework in visual and performing arts. Architectural engineering majors must take an approved architectural history course as part of the Bachelor of Science in Architectural Engineering requirement. This course (or its prerequisite) will fulfill the visual and performing arts requirement of the Core Curriculum. Additionally, the Core Curriculum visual and performing arts course may be satisfied simultaneously for flag requirement(s) as well as coursework in a potential minor and certificate program.

#### Foreign Language Requirement

In accordance with the University's basic education requirements, all students must demonstrate proficiency in a foreign language equivalent to that shown by completion of two semesters of college coursework. Credit earned at the college level to achieve the proficiency may not be counted toward a degree. For a student admitted to the University as a freshman, this requirement is fulfilled by completion of the two high school units in a single foreign language that are required for admission; students admitted with a deficiency in foreign language must remove that deficiency as specified in General Information (http:// catalog.utexas.edu/general-information/admission/undergraduateadmission/#freshmanadmissiontext).

## Applicability of Certain Courses

#### **Physical Activity Courses**

Physical activity (PED) courses are offered by the Department of Kinesiology and Health Education. They may not be counted toward a degree in the Cockrell School. However, they are counted as courses for which the student is enrolled, and the grades are included in the University grade point average.

#### **ROTC Courses**

The dean, upon recommendation of the department adviser, has the authority to substitute an equivalent air force science, military science, or naval science course or courses for a course or courses prescribed by the Cockrell School of Engineering, up to a maximum of 12 semester credit hours. Core Curriculum courses cannot be substituted.

#### **Correspondence and Extension Courses**

Credit that a University student in residence earns simultaneously by The University of Texas at Austin correspondence/extension or elsewhere or through distance education at another school will not be counted toward a degree in the Cockrell School unless specifically approved in advance by the dean. Application for this approval should be made online or at the Engineering Student Services Office, located in the Engineering Education and Research Center (EER). No more than 20 semester hours required for any degree offered in the Cockrell School may be taken by correspondence and extension.

#### **Requirements Included in All Engineering Degree Plans**

Each student must complete the University's Core Curriculum (http:// catalog.utexas.edu/general-information/academic-policies-andprocedures/core-curriculum). In the process of fulfilling engineering degree requirements, students must also complete: one independent inquiry flag, one quantitative reasoning flag, one ethics flag, one global cultures flag, one cultural diversity in the United States flag, and two writing flags. The independent inquiry flag, the quantitative reasoning flag, the ethics flag and at least one writing flag are carried by courses specifically required for each engineering degree plan. As applicable, students are advised to fulfill the second writing flag and global culture and cultural diversity requirements with a course that meets another requirement of the core curriculum, such as the first-year signature course. Students are encouraged to complete flag requirements within the first and second year of their degree program. Additionally, students are encouraged to discuss options with his or her departmental academic adviser. Courses that may be used to fulfill flag requirements (p. 23) are identified in the Course Schedule (http://registrar.utexas.edu/ schedules).

In addition, students in all engineering degree plans must complete the following requirements. In some cases, a course that fulfills one of the following requirements may also be counted toward core curriculum or flag requirements; these courses are identified below.

Hours

#### Requirements

Engineering Communication (This course may also count 3 towards the writing flag requirement and the ethics flag requirement.)		
ASE 333T	Engineering Communication	
BME 333T	Engineering Communication	
CHE 333T	Engineering Communication	
C E 333T	Engineering Communication	
E E 333T	Engineering Communication	
M E 333T	Engineering Communication	
PGE 333T	Engineering Communication	
Mathematics		
M 408C	Differential and Integral Calculus (This course may also be used to fulfill the mathematics requirement of the core curriculum and the quantitative reasoning flag requirement.)	4
M 408D	Sequences, Series, and Multivariable Calculus	4
M 427J	Differential Equations with Linear Algebra (May also be used to fulfill the quantitative reasoning flag requirement.)	4
or M 427K	Advanced Calculus for Applications I	
Physics		
РНҮ 303К	Engineering Physics I (This course may also be counted toward the science and technology, Part I, requirement of the core curriculum and the quantitative reasoning flag requirement.)	3
PHY 103M	Laboratory for Physics 303K	1

PHY 303L	Engineering Physics II (This course may also be counted toward the science and technology, Part I, requirement of the core curriculum and the quantitative reasoning flag requirement.)	3
PHY 103N	Laboratory for Physics 303L	1

#### Length of Degree Program

An eight-semester arrangement of courses leading to the bachelor's degree is given for each of the engineering degree plans. The exact order in which the courses are taken is not critical, as long as the prerequisite for each course is fulfilled. A student who registers for fewer than the indicated number of hours each semester will need more than eight semesters to complete the degree. The student is responsible for including in each semester's work any courses that are prerequisite to those he or she will take the following semester.

# Bachelor of Science in Aerospace Engineering

The field of aerospace engineering developed because of humanity's desire for aircraft systems for military, commercial, and civilian purposes; it was first called aeronautical engineering or aeronautics. When the space age began, it was natural for aeronautical engineers to participate in the development of spacecraft systems for space exploration. This branch of engineering became known as astronautical engineering or astronautics, and the combined field is called aerospace engineering or aeronautics and astronautics. Because of the diverse nature of the work, the aerospace engineer must have a basic knowledge of physics, mathematics, digital computation, and the various disciplines of aerospace engineering: aerodynamics and propulsion, structural mechanics, flight mechanics and orbital mechanics, and control. Because of their extensive education in fundamental disciplines, aerospace engineers can work in areas other than aerospace engineering and are employed in a wide range of careers.

The objectives of the aerospace engineering degree program are to prepare students for professional practice in aerospace engineering and related engineering and scientific fields; to prepare students for such postbaccalaureate study as their aptitudes and professional goals may dictate; to instill in students a commitment to lifelong education and to ethical behavior throughout their professional careers; and to make students aware of the global and societal effects of technology. To meet these objectives, the faculty has designed a rigorous curriculum that emphasizes fundamentals in the basic sciences, mathematics, and the humanities, and integrates classroom and laboratory experiences in the engineering disciplines of aerodynamics and propulsion, structural mechanics, mechanics of materials, flight and orbital mechanics, controls, computation, electromechanical systems, design, and technical communication. The curriculum requires students to use modern engineering tools, to work individually, and to practice teamwork.

The first two years of the aerospace engineering curriculum emphasize fundamental material along with engineering sciences, while the third year introduces concepts in the areas of fluid mechanics, structural mechanics, system dynamics and control, and experimentation. The fourth year provides further depth in aerospace engineering, with emphasis on design and laboratory courses. During the junior year, the student elects to pursue one of two technical areas, atmospheric flight or space flight. Both area options are complemented by general education courses and courses offered in other engineering disciplines. In addition, the student may choose technical electives that increase the breadth of the program or that provide additional depth within one or more subdisciplines within the department. All of the following subdisciplines are also represented in the required courses for both technical area options.

#### **Aerodynamics and Propulsion**

This subdiscipline involves fluid motion, propulsion, lift and drag on wings and other bodies, high-speed heating effects, and wind tunnel investigation of these problems. Topics of study include fluid mechanics, gas dynamics, heat transfer, aerodynamics, propulsion, computational fluid dynamics, and experimental fluid mechanics.

#### **Structural Mechanics**

1

This subdiscipline includes the study of airplane, spacecraft, and missile structures, the materials that make them efficient, and methods for testing, analysis, and design of new structural systems. Course topics include structural analysis, structural dynamics, materials (including advanced composites), aeroelasticity, experimental structural mechanics, and computer-aided design of structures.

#### **Flight Mechanics and Orbital Mechanics**

Flight mechanics involves the analysis of the motion of aircraft, missiles, rockets, reentry vehicles, and spacecraft that are subjected to gravitational, propulsive, and aerodynamic forces; the study of uncontrolled motion of satellites and coasting spacecraft is usually referred to as orbital mechanics. Subject matter in these areas includes trajectory analysis and optimization; attitude dynamics, stability, and control; flight test; orbit determination; orbital operations; systems engineering; sensors; satellite hardware applications; and simulation.

#### **Flight Control**

Control theory is applied in aerospace engineering to the development of automatic flight control systems for aircraft (autopilots and stability augmentation systems), attitude control systems for satellites, and guidance and control systems for missiles, rockets, reentry vehicles, and spacecraft. Course topics include linear system theory, classical control theory, digital control, and probability theory.

#### **Portable Computing Devices**

Students entering aerospace engineering are required to have access to a portable computing device capable of running the software tools required for undergraduate engineering analyses (MATLAB, SOLIDWORKS, Word, Excel, etc.) and accessing the remote server for the department. This device does not need to be brought to campus on a daily basis, but individual courses may require that the device be brought to certain lectures, labs, and/or exams. Minimum and recommended specifications may be found on the department website.

#### Curriculum

Course requirements include courses within the Cockrell School of Engineering and other required courses. In addition, each student must complete the University's Core Curriculum (p. 23). In some cases, a course that fulfills one of the following requirements may also be counted toward Core Curriculum or flag requirements; these courses are identified below.

In the process of fulfilling engineering degree requirements, students must also complete coursework to satisfy the following flag requirements: one independent inquiry flag, one quantitative reasoning flag, one ethics flag, one global cultures flag, one cultural diversity in the United States flag, and two writing flags. The independent inquiry flag, the quantitative reasoning flag, the ethics flag, and both writing flags are carried by courses specifically required for the degree; these courses are identified below. Courses that may be used to fulfill flag requirements (p. 23) are identified in the *Course Schedule* (http://registrar.utexas.edu/schedules).

Courses used to fulfill technical elective requirements must be approved by the aerospace engineering faculty before the student enrolls in them.

The student must take all courses required for the degree on the letter-grade basis and must earn a grade of at least *C*- in each course, except for those listed as Remaining Core Curriculum courses. He or she must also maintain grade point averages of at least 2.00 in the major area of study and in required technical courses as described in Academic Standards (p. 187), and a cumulative University grade point average of at least 2.00 as described in *General Information* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/evaluation/#gradestext).

#### Requirements

nequiremento		Juio	
Aerospace Engineering Courses			
ASE 120K	Low-Speed Aerodynamics Laboratory	1	
ASE 320	Low-Speed Aerodynamics	3	
ASE 324L	Aerospace Materials Laboratory	3	
ASE 330M	Linear System Analysis	3	
ASE 333T	Engineering Communication (writing flag and ethics flag)	3	
ASE 362K	Compressible Flow	3	
ASE 366K	Spacecraft Dynamics	3	
ASE 367K	Flight Dynamics	3	
ASE 370C	Feedback Control Systems	3	
ASE 375	Electromechanical Systems	3	
ASE 376K	Propulsion	3	
Chemistry			
CH 301	Principles of Chemistry I (part II science and technology)	3	
<b>Computational Engineer</b>	ing		
COE 301	Introduction to Computer Programming	3	
COE 311K	Engineering Computation	3	
Engineering Mechanics			
E M 306	Statics	3	
E M 311M	Dynamics	3	
E M 319	Mechanics of Solids	3	
Mathematics			
M 408C	Differential and Integral Calculus (mathematics; quantitative reasoning flag)	4	
M 408D	Sequences, Series, and Multivariable Calculus	4	
M 427J	Differential Equations with Linear Algebra (quantitative reasoning flag)	4	
or M 427K	Advanced Calculus for Applications I		
M 427L	Advanced Calculus for Applications II	4	
Physics			
PHY 103M	Laboratory for Physics 303K	1	
PHY 103N	Laboratory for Physics 303L	1	

РНҮ 303К	Engineering Physics I (part I science and technology; quantitative reasoning flag)	3
PHY 303L	Engineering Physics II (part I science and technology; quantitative reasoning flag)	3
Rhetoric and Writing		
RHE 306	Rhetoric and Writing (English composition)	3
Other required courses		
Technical area courses		13
Approved technical electronical electronicae	ctives	6
Structures elective		3
M E 210	Engineering Design Graphics	2
M E 310T	Applied Thermodynamics	3
Remaining Core Curricu	ulum Courses	
E 316L	British Literature <sup>1</sup>	3
or E 316M	American Literature	
or E 316N	World Literature	
or E 316P	Masterworks of Literature	
American and Texas go	overnment <sup>2</sup>	6
American history <sup>2</sup>		6
Social and behavioral s	ciences <sup>3</sup>	3
Visual and performing a	arts <sup>3</sup>	3
UGS 302	First-Year Signature Course <sup>4</sup>	3
or UGS 303	First-Year Signature Course	
	e English humanities courses (E 316L, ry a global cultures or cultural diversity	
,	a cultural diversity flag.	
<ol> <li>Some sections carry diversity flag.</li> </ol>	a global cultures and/or cultural	

4. In UGS 302, all sections carry a writing flag. In UGS 303, some sections carry a writing flag.

**Total Hours** 

Hours

#### **Technical Area Options**

The technical area option allows the student to choose 13 semester hours of technical area courses in either atmospheric flight or space flight. Each student should choose a technical area by the end of the first semester of the junior year and plan an academic program to meet the area requirements in the next three semesters. Many students choose technical electives that will strengthen their backgrounds in one specialty area, but this is not required. It should be noted that a student may choose the technical area courses in the other technical area as technical electives.

127

#### Area 1, Atmospheric Flight

Also called aeronautics, this area provides the student with a wellrounded program of study emphasizing the major disciplines of aerodynamics, propulsion, structures, design, performance, and control of aircraft. These subjects are treated at a fundamental level that lays a foundation for work in a broad variety of specialties in the aircraft industry. This option is intended for the undergraduate student whose primary interest is aircraft.

Computational Engineering 321K, Computational Methods for Structural Analysis

Aerospace Engineering 361K, *Aircraft Design I* (carries an independent inquiry flag)

Aerospace Engineering 361L, *Aircraft Design II* (carries a writing flag) Aerospace Engineering 162M, *High-Speed Aerodynamics Laboratory* Aerospace Engineering 364, *Applied Aerodynamics* 

#### Area 2, Space Flight

Also called astronautics, this area offers a well-rounded program of study that provides a background in the traditional areas of fluid mechanics, materials, structures, propulsion, controls, and flight mechanics, while also giving the student a chance to learn about the space environment, attitude determination and control, orbital mechanics, mission design, and spacecraft systems engineering. These subjects are treated at a fundamental level that lays a foundation for work in a broad variety of specialties in space-related industries. This option is intended for the undergraduate student whose primary interest is space and spacecraft.

Aerospace Engineering 366L, *Applied Orbital Mechanics* Aerospace Engineering 166M, *Spacecraft Systems Laboratory* Aerospace Engineering 372K, *Attitude Dynamics* Aerospace Engineering 374K, *Space Systems Engineering Design* Aerospace Engineering 374L, *Spacecraft/Mission Design* (carries an independent inquiry flag and a writing flag)

#### **Structures Elective**

The degree requires all students to take three semester hours of an approved structures elective.

Students pursuing the Technical Area 1, Atmospheric Flight, must take Aerospace Engineering 365, *Structural Dynamics*, to fulfill this requirement.

Students pursuing Technical Area 2, Space Flight, will choose one of four options to fulfill this requirement:

Aerospace Engineering 339/Engineering Mechanics 339, Advanced Strength of Materials

Aerospace Engineering 357, *Mechanics of Composite Materials* Aerospace Engineering 365, *Structural Dynamics* 

Computational Engineering 321K, Computational Methods for Structural Analysis.

#### **Special Projects Laboratories**

The department offers students the opportunity to participate in special projects such as student-built radio-controlled aircraft competitions and student satellite-building projects. These time-intensive projects are open to all aerospace engineering students with at least 15 semester hours of University credit toward the degree and a grade point average of at least 2.50. Academic credit for participation in departmentally approved student projects is available on the pass/fail basis through the course Aerospace Engineering 128. Three such laboratory courses can be combined to count as one three-hour technical elective; one such laboratory course can be combined with a two-hour cooperative program to count as one three-hour technical elective.

# Suggested Arrangement of Courses

First Year		
First Term	Hours Second Term	Hours
UGS 302 or 303	3 COE 301	3
CH 301	3 M 408D	4
M 408C	4 PHY 303K	3
RHE 306	3 PHY 103M	1
Social and behavioral sciences of visual and performing arts	or 3 American and Texas government	3

	American history	3
	16	17
Second Year		
First Term	Hours Second Term	Hours
E M 306	3 COE 311K	3
M 427J or 427K	4 E M 311M	3
PHY 303L	3 E M 319	3
PHY 103N	1 M 427L	4
M E 210	2 ASE 333T	3
M E 310T	3	
	16	16
Third Year		
First Term	Hours Second Term	Hours
ASE 320	3 ASE 362K	3
ASE 120K	1 ASE 367K	3
ASE 330M	3 Social and behavioral sciences or	3
	visual and performing arts	
Structures Elective	3 Technical area courses	7
ASE 366K	3	
E 316L, 316M, 316N, or 316P	3	
	16	16
Fourth Year		
First Term	Hours Second Term	Hours
ASE 375	3 ASE 324L	3
ASE 376K	3 ASE 370C	3
Technical area courses	6 Technical area elective	3
Technical elective	3 American history	3
	American and Texas government	3
	15	15

Total credit hours: 127

### Bachelor of Science in Architectural Engineering

Buildings are the domain of architectural engineers and endpoints of this important engineering discipline. Americans spend over 70 total years of an average lifetime inside of buildings. As such, an important role of architectural engineers is to design buildings that are structurally resilient and able to withstand the loads that act on their exterior and interior surfaces. Because of the amount of time people spend in them, it is also important that buildings be designed, constructed, operated, and maintained to be healthy environments, free of airborne or surface contamination that can adversely affect occupants. Furthermore, buildings should also be comfortable environments that facilitate worker productivity and learning. In the United States, buildings account for nearly 40% of all energy use, over 70% of electricity use, and are major contributors to greenhouse gas emissions. As such, architectural engineers strive to design, construct, and operate both energy efficient and healthy buildings, with an increasing focus on the use of appropriate green building materials and products.

The building sector represents a major fraction of the United States economy, and buildings are by far the number one asset amongst all assets in the United States. Their appropriate design is critical for the people they serve, national and global economies, and for reasons of environmental sustainability. The curriculum in architectural engineering is designed to meet these needs. It offers training in the fundamentals of engineering, with specialization in structural analysis and design, building energy and environments, building construction, and materials. This curriculum affords the student the opportunity to attain competence in the structural design of resilient buildings, from high-rise office buildings to single-family homes, and from hospitals to schools. Courses in building energy and environments provide graduates with knowledge relevant to the design and operation of both energy efficient and healthy buildings. Students will also gain important knowledge related to sustainable construction practices, construction management, and modern building materials.

The extensive technical requirements, coupled with courses in arts and sciences, provide the architectural engineering student with an opportunity to obtain a background that is ideally suited for careers and positions of responsibility with consulting engineering firms, general contractors, manufacturers, government agencies, and architecture firms. The curriculum also serves as an excellent springboard to graduate study in the areas of structural engineering, building energy and environments, construction engineering and project management, or infrastructure materials engineering.

#### **Student Outcomes**

Graduates of the architectural engineering program are expected to have

- An ability to apply knowledge of mathematics, science, and engineering
- An ability to design and conduct experiments, as well as to analyze and interpret data
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- · An ability to function on multidisciplinary teams
- · An ability to identify, formulate, and solve engineering problems
- · An understanding of professional and ethical responsibility
- · An ability to communicate effectively
- The broad education necessary to understand what impact engineering solutions have in global, economic, environmental, and societal contexts
- Recognition of the need for and an ability to engage in lifelong learning
- · Knowledge of contemporary issues
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

#### **Program Educational Objectives**

Graduates of the architectural engineering program should solve architectural engineering problems within a greater societal context. They should:

- Exhibit character and decision-making skills embodying professionalism and ethical behavior
- Apply knowledge, strong reasoning, and quantitative skills to design and implement creative and sustainable solutions
- Engage in lifelong learning to meet evolving engineering challenges facing society
- Exhibit strong communication, critical thinking, interpersonal, and management skills as leaders and contributors in the architectural engineering profession

#### Dual Degree program in Architectural Engineering and Architecture

A program that leads to both the Bachelor of Science in Architectural Engineering degree and the Bachelor of Architecture degree is available to qualified students. The program combines the course requirements of both degrees and requires six years for completion. Students who wish to pursue both degrees must apply for admission to the School of Architecture according to the procedures and deadlines established by the school. The program is described in Bachelor of Architecture/ Bachelor of Science in Architectural Engineering Dual Degree Program (p. 37); additional information is available from the undergraduate adviser for architectural engineering.

#### **Portable Computing Devices**

Student entering Architectural Engineering are required to have a laptop at their disposal. Laptops do not need to be brought to campus on a daily basis, but individual courses may require that a laptop be brought to class or lab sessions. For more information, see the list of minimum system requirements (http://www.caee.utexas.edu/component/content/ article/43-students/it/480-uglaptop).

#### Curriculum

Course requirements include courses within the Cockrell School of Engineering and other required courses. In addition, each student must complete the University's Core Curriculum (p. 23). In some cases, a course required for the Bachelor of Science in Architectural Engineering may also be counted toward the core curriculum; these courses are identified below. To ensure that courses used to fulfill the social and behavioral sciences and visual and performing arts requirements of the core curriculum also meet ABET criteria, students should follow the guidance given in Liberal Education of Engineers.

In the process of fulfilling engineering degree requirements, students must also complete coursework to satisfy the following flag requirements: one independent inquiry flag, one quantitative reasoning flag, one ethics flag, one global cultures flag, one cultural diversity in the United States flag, and two writing flags. The independent inquiry flag, the quantitative reasoning flag, the ethics flag, the global cultures flag, and one writing flag are carried by courses specifically required for the degree; these courses are identified below. Students are advised to fulfill the second writing flag requirement with a course that meets another requirement of the core curriculum. Courses that may be used to fulfill flag requirements (p. 23) are identified in the *Course Schedule* (http:// registrar.utexas.edu/schedules).

Requirements		Hours	
Architectural Engineering	Courses		
ARE 102	Introduction to Architectural Engineering	1	I
ARE 217	Computer-Aided Design and Graphics	2	2
ARE 320K	Introduction to Design I	3	3
ARE 320L	Introduction to Design II	Э	3
ARE 323K	Project Management and Economics	3	3
ARE 335	Materials and Methods of Building Construction	3	}
ARE 346N	Building Environmental Systems	3	3
ARE 346P	HVAC Design	3	3
or ARE 371	Energy Simulation in Building Design	ı	
ARE 366	Contracts, Liability, and Ethics (ethics flag)	3	3
ARE 465	Integrated Design Project (independent inquiry flag)	2	ļ
Civil Engineering			
C E 311K	Introduction to Computer Methods	Э	3
CE311S	Probability and Statistics for Civil Engineers	3	3
C E 319F	Elementary Mechanics of Fluids	Э	3

C E 324P	Properties and Behavior of	3
	Engineering Materials	
C E 329	Structural Analysis	3
C E 331	Reinforced Concrete Design	3
or C E 335	Elements of Steel Design	
C E 333T	Engineering Communication (writing flag; ethics flag)	3
C E 357	Geotechnical Engineering	3
Chemistry		
CH 301	Principles of Chemistry I (part II science and technology)	3
Engineering Mechanics		
E M 306	Statics	3
E M 319	Mechanics of Solids	3
Mathematics		
M 408C	Differential and Integral Calculus (mathematics; quantitative reasoning flag)	4
M 408D	Sequences, Series, and Multivariable Calculus	4
M 427J	Differential Equations with Linear Algebra (quantitative reasoning flag)	4
or M 427K	Advanced Calculus for Applications I	
Physics		
PHY 103M	Laboratory for Physics 303K	1
PHY 103N	Laboratory for Physics 303L	1
РНҮ 303К	Engineering Physics I (part I science and technology)	3
PHY 303L	Engineering Physics II (part I science and technology)	3
Other Required Courses		
GEO 303	Introduction to Geology	3
M E 320	Applied Thermodynamics	3
Approved architectural hi arts; global cultures flag)	story elective (visual and performing	3
Approved mathematics of	r science elective	3
Approved technical elect	ives	9
Remaining Core Curriculu	um Courses	
RHE 306	Rhetoric and Writing (English composition)	3
E 316L	British Literature <sup>1</sup>	3
or E 316M	American Literature	
or E 316N	World Literature	
or E 316P	Masterworks of Literature	
American and Texas gove	ernment <sup>2</sup>	6
American history <sup>2</sup>		6
Social and behavioral sci	ence <sup>3</sup>	3
UGS 302	First-Year Signature Course <sup>4</sup>	3
or UGS 303	First-Year Signature Course	
1. Some sections of the l	isted English humanities courses (F	

1. Some sections of the listed English humanities courses (E 316L, 316M, 316N, 316P) carry a global cultures or cultural diversity flag.

2. Some sections carry a cultural diversity flag.

3. Some sections carry a global cultures and/or cultural diversity flag.

4. In UGS 302, all sections carry a writing flag. In UGS 303, some sections carry a writing flag.

Total Hours

### **Technical Electives**

Technical electives in architectural engineering are listed in three areas of specialization below. Nine semester hours must be chosen from the following approved technical elective courses or selected with the approval of the department undergraduate adviser. Lower-division courses may not be used as technical electives.

126

#### Area 1, Structural Engineering

Architectural Engineering 345K, Masonry Engineering Architectural Engineering 362L, Structural Design in Wood Civil Engineering 331, Reinforced Concrete Design or 335, Elements of Steel Design Civil Engineering 360K, Foundation Engineering (carries an independent inquiry flag) Civil Engineering 362M, Advanced Reinforced Concrete Design (carries an independent inquiry flag) Civil Engineering 362N, Advanced Steel Design (carries an independent inquiry flag) Civil Engineering 363, Advanced Structural Analysis Civil Engineering 375, Earth Slopes and Retaining Structures Engineering Mechanics 339, Advanced Strength of Materials Area 2, Building Energy and Environments

Architectural Engineering 346P, HVAC Design or 371, Design of Energy
Efficient and Healthy Buildings
Architectural Engineering 370, Design of Energy Efficient and Healthy
Buildings
Civil Engineering 341, Introduction to Environmental Engineering
Mechanical Engineering 339, Heat Transfer
Mechanical Engineering 374F, Fire Science
Mechanical Engineering 374S, Solar Energy Systems Design
Mechanical Engineering 379N, Engineering Acoustics

#### Area 3, Construction and Infrastructure Materials Engineering

Architectural Engineering 358, Cost Estimating in Building Construction

Architectural Engineering 376, Building Information Modeling for Capital Projects

Civil Engineering 351, Concrete Materials

Mechanical Engineering 349, *Corrosion Engineering* Mechanical Engineering 378K, *Mechanical Behavior of Materials* Mechanical Engineering 378P, *Properties and Applications of Polymers* 

# Suggested Arrangement of Courses

First Year		
First Term	Hours Second Term	Hours
ARE 102	1 Approved architectural history elective	3
CH 301	3 GEO 303	3
M 408C	4 M 408D	4
RHE 306	3 PHY 303K	3
UGS 302 or 303	3 PHY 103M	1
	Social and behavioral sciences	3
	14	17

Second Year		
First Term	Hours Second Term	Hours
C E 311K	3 ARE 217	2
E M 306	3 C E 311S	3
M 427J or 427K	4 E M 319	3
PHY 303L	3 C E 319F	3
PHY 103N	1 C E 333T	3
American history	3 American history	3
	17	17
Third Year		
First Term	Hours Second Term	Hours
ARE 320K	3 ARE 320L	3
C E 324P	3 ARE 335	3
C E 329	3 ARE 346N	3
C E 357	3 C E 331 or 335	3
M E 320	3 E 316L, 316M, 316N, or 316P	3
	15	15
Fourth Year		
First Term	Hours Second Term	Hours
ARE 323K	3 ARE 465	4
ARE 346P or 371	3 ARE 366	3
Approved math/science elective	3 American government	3
Approved technical elective	3 Approved technical electives	6
American and Texas government	3	
	15	16

Total credit hours: 126

# Bachelor of Science in Biomedical Engineering

The mission of the Department of Biomedical Engineering is to develop clinically translatable solutions for human health by training the next generation of biomedical engineers, cultivating leaders, and nurturing the integration of science, engineering, and medicine in a discoverycentered environment. The main educational objective is to provide a thorough training in the fundamentals of engineering science, design, and biology. The curriculum is designed to provide concepts central to understanding living systems from the molecular and cellular levels to the tissue and organismal levels. The curriculum incorporates principles of vertical integration, leading to the choice of a technical area (biomedical imaging and instrumentation, cellular and biomolecular engineering, computational biomedical engineering, or biomechanics), and culminates in a team capstone design experience. Students are expected to develop an understanding of industrial, research, and clinical biomedical engineering environments; an understanding of regulatory issues and biomedical ethics; the ability to create, identify, formulate, and solve biomedical engineering problems; the ability to design systems to meet needs in medical/life science applications; an understanding of life processes at the molecular, cellular, tissue, and organismal levels; the ability to use instrumentation and to make measurements and interpret data in living systems; and an appreciation of the interdisciplinary nature of biomedical engineering research.

### **Portable Computing Devices**

Students entering biomedical engineering are required to have a laptop computer. Laptops do not need to be brought to campus on a daily basis, but individual courses may require that a laptop be brought to certain lectures, labs, and/or exams. Minimum requirements for the laptop are listed on the department's website.

### **Student Outcomes**

Graduates of the biomedical engineering program are expected to have:

- An ability to apply knowledge of mathematics, science, and engineering
- An ability to design and conduct experiments, as well as to analyze and interpret data
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- · An ability to function on multidisciplinary teams
- · An ability to identify, formulate, and solve engineering problems
- · An understanding of professional and ethical responsibility
- · An ability to communicate effectively
- The broad education necessary to understand what impact engineering solutions have in global, economic, environmental, and societal contexts
- A recognition of the need for and an ability to engage in lifelong learning
- A knowledge of contemporary issues
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

#### **Program Educational Objectives**

Achievement of the preceding program outcomes gives students the foundation for accomplishing the biomedical engineering program educational objectives. A few years after graduation, students are expected to be able to:

- Conduct themselves with exemplary professional ethics and highest integrity
- Demonstrate a quantitative, analytical, and systems approach to problem solving in their professional practice
- Demonstrate a continuous quest for professional excellence and success
- Participate in continuing education to expand their knowledge of contemporary professional issues
- Exhibit effective scientific, technical, communication, and resource management skills in their professional practice

#### Curriculum

Course requirements include courses within the Cockrell School of Engineering, and other required courses. In addition, each student must complete the University's core curriculum (p. 23). In some cases, a course that fulfills one of the following requirements may also be counted toward core curriculum or flag requirements; these courses are identified below.

In the process of fulfilling engineering degree requirements, students must also complete coursework to satisfy the following flag requirements: one independent inquiry flag, one quantitative reasoning flag, one ethics flag, one global cultures flag, one cultural diversity in the United States flag, and two writing flags. The independent inquiry flag, the quantitative reasoning flag, the ethics flag, and the two writing flags are carried by courses specifically required for the degree; these courses are identified below. Courses that may be used to fulfill flag requirements (p. 23) are identified in the *Course Schedule* (http://registrar.utexas.edu/schedules).

Prior to registration, students must receive approval from the Biomedical Engineering Academic Advising Office for courses to be used to fulfill technical and nontechnical course requirements. The student must take all courses required for the degree on the letter-grade basis and must earn a grade of at least *C*- in each, except for those listed as Remaining Core Curriculum Courses.

Requirements Hours			
Biomedical Engineering			
BME 214L	Computational Fundamentals of Biomedical Engineering Design	2	
BME 245L	Experimental Principles of Biomedical Engineering Design	2	
BME 261L	Development and Analysis in Biomedical Engineering Design	2	
BME 303	Introduction to Computing	3	
BME 303L	Introduction to Biomedical Engineering Design	3	
BME 311	Network Analysis in Biomedical Engineering	3	
BME 313L	Introduction to Numerical Methods in Biomedical Engineering	3	
BME 333T	Engineering Communication (writing and an ethics flag)	3	
BME 335	Engineering Probability and Statistics	3	
BME 343	Biomedical Engineering Signal and Systems Analysis	3	
BME 344	Biomechanics	3	
BME 349	Biomedical Instrumentation	3	
BME 352	Engineering Biomaterials	3	
BME 353	Transport Phenomena in Living Systems	3	
BME 355	Molecular Engineering	3	
BME 365R	Quantitative Engineering Physiology I	3	
BME 365S	Quantitative Engineering Physiology II	3	
BME 370	Biomedical Engineering Capstone Design I (writing flag)	3	
BME 371	Biomedical Engineering Capstone Design II (independent inquiry flag)	3	
Approved technical area	elective	12	
Biology			
BIO 206L	Introductory Laboratory Experiments in Biology	2	
BIO 311C	Introductory Biology I	3	
<b>Biochemistry and Chemi</b>	stry		
BCH 369	Fundamentals of Biochemistry	3	
CH 128K	Organic Chemistry Laboratory	1	
CH 301	Principles of Chemistry I	3	
CH 302	Principles of Chemistry II	3	
CH 204	Introduction to Chemical Practice	2	
CH 320M	Organic Chemistry I	3	
or CH 328M	Organic Chemistry I		
Mathematics			
M 408C	Differential and Integral Calculus (mathematics; quantitative reasoning flag)	4	
M 408D	Sequences, Series, and	4	
	Multivariable Calculus		

M 427J	Differential Equations with Linear Algebra (quantitative reasoning flag)	4
Physics		
PHY 103M	Laboratory for Physics 303K	1
PHY 103N	Laboratory for Physics 303L	1
РНҮ 303К	Engineering Physics I (part I science and technology; quantitative reasoning flag)	3
PHY 303L	Engineering Physics II (part I science and technology; quantitative reasoning flag)	3
Rhetoric and Writing		
RHE 306	Rhetoric and Writing (English composition)	3
Remaining Core Curricu	um Courses	
E 316L	British Literature <sup>1</sup>	3
or E 316M	American Literature	
or E 316N	World Literature	
or E 316P	Masterworks of Literature	
American and Texas gov	vernment <sup>2</sup>	6
American history <sup>2</sup>		6
Social and behavioral so	iences <sup>3</sup>	3
Visual and performing a	rts <sup>3</sup>	3
UGS 302	First-Year Signature Course <sup>4</sup>	3
or UGS 303	First-Year Signature Course	
	English humanities courses (E 316L, a global cultures or cultural diversity	
2. Some sections carry a	a cultural diversity flag.	
3. Some sections carry a diversity flag.	a global cultures and/or cultural	
4. In UGS 302, all section some sections carry a w	ns carry a writing flag. In UGS 303, riting flag.	

#### Integrated BSBME/MSE program

**Minimum Required** 

The integrated degree program results in simultaneously awarding a Bachelor of Science in Biomedical Engineering (BSBME) and a Master's of Science in Engineering (MSE) degree offered by the graduate program in biomedical engineering. The objective of the Integrated BSBME/MSE Program is to enable prepared undergraduates in Biomedical Engineering to earn two degrees in a shortened time period. By applying AP and Credit by Exam courses, having students take recommended summer courses, and allowing seniors to enroll in graduate-level engineering courses reserved for graduate credit, the program enables graduates to complete both degree requirements in five years.

133

Admissions. Current undergraduate BME students may begin the application process to the Integrated BSBME/MSE Program option in the first term of their third year. Admission includes the two steps outlined below. Undergraduate students not in the biomedical engineering major are not eligible to apply. It is expected that all students selected for the program in Step 1 and have been successful in their first graduatelevel coursework will be selected for admission in Step 2. Successful completion will be evaluated and determined by the department's Domestic Graduate Admission Committee and the Graduate Adviser. Step 1. Students go through the first step in application for admission to the Integrated BSBME/MSE Program in the first term of the third year. The Step 1 application is internal through the department and includes a resume, statement of purpose, and letters of recommendation. Qualified applicants will be selected based on the applicant's progress to degree completion, grade point average, and other qualifications included in the application materials. Selected students will be notified early in the second term of the third year of their admission status for the integrated program, allowing them to meet with an academic adviser to plan graduate coursework in the first term of their fourth year.

Step 2. Students go through the second step in the application after the first term of their fourth year. The Step 2 application is formal through the Graduate and International Admission Center (GIAC) and includes a resume, statement of purpose, letters of recommendation, and a TOEFL score (if required). Qualified applicants will be selected based on success in graduate-level engineering courses in the first term of their fourth year, grade point average, and other qualifications included in the application materials. Graduate Record Exam (GRE) test scores are required for admission through GIAC.

If a student in their fourth year is taking graduate courses and would be on track to complete the integrated program but did not apply in their third year through Step 1, they may also choose to apply in Step 2 and formally apply through GIAC. These students will be evaluated for admission on the same criteria.

**Degree Requirements.** In order for integrated program students to complete both the BSBME and MSE degrees in five years, the department waives six semester credit hours (SCH) of technical area electives in lieu of six SCH of graduate engineering coursework reserved for graduate credit taken in the fourth year. This reduces the total BSBME degree requirements for integrated program students from 133 to 127 SCH. The remaining required six SCH of technical area electives required for the BSBME degree must be taken in engineering (see Technical Area Options section below).

Students in the integrated program complete 12 SCH of graduate coursework in their fourth year and 18 SCH of graduate coursework in their fifth year to complete a total of 30 SCH of graduate coursework for the MSE degree as described in the Graduate Catalog (http:// catalog.utexas.edu/graduate/fields-of-study/engineering/biomedical-engineering/degree-requirements). Students have the option of choosing the coursework or thesis options for the MSE degree as described in the Graduate Catalog (http://catalog.utexas.edu/graduate/fields-of-study/engineering/biomedical-engineering/degree-requirements). Which courses the student takes will be determined with the graduate adviser and academic adviser to ensure compliance with degree requirements and meet the students' career goals.

Students unable to successfully complete the integrated program, or who wish to terminate pursuit of the MSE for any reason, may obtain a BSBME degree by satisfying all of the requirements for the standalone degree. Two of the graduate courses (6 SCH) taken in the fourth year may count toward the 12 SCH of technical area electives required to complete the entire 133 SCH requirements. An undergraduate student leaving the integrated program will be on a trajectory to graduate with the regular BSBME degree in the same timeframe prior to admission to the integrated program.

Graduates of the integrated program will receive the BSBME and MSE degrees simultaneously after successfully completing the 127 SCH for the BSBME and 30 SCH for the MSE, a total of 157 SCH. It is expected that students in this program will graduate with both degrees in a total of five years to completion.

**Advising.** Once admitted, students will be advised each semester by the graduate adviser and an academic adviser to complete coursework required for the BSBME degree in their fourth year, and completion of the coursework required for the MSE degree in their fourth and fifth years.

Information regarding the integrated program requirements and policies may be obtained from the Biomedical Engineering Academic Advising Office in BME 3.308.

#### **Technical Area Options**

The technical area option allows the student to build on the biomedical engineering core curriculum by choosing 12 semester hours of technical area coursework. A minimum of six semester hours of the 12 semester hours of technical area coursework must be taken within engineering. Students choose coursework in one of the following four areas: biomedical imaging and instrumentation; cellular and biomolecular engineering; computational biomedical engineering; or biomechanics. Within some technical areas, career emphases are available for students to focus coursework toward a particular career track. Students have flexibility to take technical elective coursework from more than one career emphasis under the same technical area. Each student should choose a technical area by the end of the sophomore year and plan an academic program to meet the area requirements during the next two years. Students can visit the Biomedical Engineering Academic Advising Office in BME 3.308 for more information about the Technical Area Options.

Preparation for health professions. Students who plan to attend medical, veterinary, or dental school in Texas must complete coursework in addition to that required for the BS in Biomedical Engineering in order to meet professional school admission requirements; those who plan to attend schools outside Texas may need additional coursework. The student is responsible for knowing and meeting these additional requirements, but assistance and information are available in the Health Professions Office in the College of Natural Sciences, PAI 5.03. Additional information about preparation for health professions is available online at https://cns.utexas.edu/health-professions.

**Preparation for law.** There is no sequential arrangement of courses prescribed for a pre-law program. The Association of American Law Schools puts special emphasis on comprehension and expression in words, critical understanding of the human institutions and values with which the law deals, and analytical power in thinking. Courses relevant to these objectives deal with communication of ideas, logic, mathematics, social sciences, history, philosophy, and the physical sciences. Services for pre-law students are provided to students in all colleges by Liberal Arts Career Services in FAC 18, and to engineering students by the Engineering Career Assistance Center (ECAC) in EER 2.604. Additional information about preparation for law is available online at https://liberalarts.utexas.edu/lacs/index.php.

**Plan II Honors Program.** Students enrolled in the Plan II Honors Program are encouraged to contact the Biomedical Engineering Academic Advising Office, in addition to the Plan II Office to ensure that requirements for both programs are met. Plan II courses may count toward biomedical engineering program requirements.

**Minors and Certificate programs.** Biomedical engineering students may enrich their education through minors and certificate programs. For a full list please see Minor and Certificate Programs (p. 13). Common examples of certificates completed by Biomedical engineering students are as follows:

*Business Minor.* Students who wish to learn about fundamental business concepts and practices may take supplemental coursework that leads to the Business Minor, awarded by the Red McCombs School

of Business. The certificate description is provided in the Minor and Certificate Programs section of the McCombs School of Business in the Undergraduate Catalog (p. 69).

*Business of Healthcare Certificate*. The Red McCombs School of Business offers this certificate to prepare students for the unique challenges and opportunities in the field of healthcare. The certificate description is provided in the Minor and Certificate Programs section of the McCombs School of Business in the Undergraduate Catalog (p. 72).

*Elements of Computing.* Students who wish to learn about computer science may take the coursework that leads to the certificate in the Elements of Computing, awarded by the Department of Computer Science. The certificate description is provided in the Minor and Certificate Programs section of the College of Natural Science in the Undergraduate Catalog (p. 686).

*Pre-Health Professions Certificate.* This certificate provides majors outside of the College of Natural Sciences (CNS) access to the courses required to complete health professions prerequisites. The certificate description is provided in the Minor and Certificate Programs section of the College of Natural Science in the Undergraduate Catalog (p. 689).

*Bridging Disciplines Programs.* These interdisciplinary programs offer students the opportunity to develop skills to collaborate across disciplines and cultures. The certificate description is provided in the Minor and Certificate Programs section of the School of Undergraduate Studies in the Undergraduate Catalog (p. 24).

## Technical Area 1, Biomedical Imaging and Instrumentation

This technical area is designed for students interested in the general area of medical imaging science and instrumentation design. Two career emphases are available in this area: biomedical imaging and biomedical instrumentation. Students are required to select 12 semester hours from any of the Technical Area 1 electives; six of the 12 hours must be within engineering.

#### **Career Emphasis A: Biomedical Imaging**

The main objective of this emphasis is to prepare students for a career in biomedical imaging. A solid foundation, practical knowledge, and skills are established in optics, imaging modalities, and image and signal processing.

While students are required to select 12 hours from any of the Technical Area 1 electives, the following are recommended for the biomedical imaging career emphasis:

Biomedical Engineering 347, *Fundamentals of Biomedical Optics* Biomedical Engineering 350, *Computational Methods for Biomedical Engineers* 

Biomedical Engineering 357, *Biomedical Imaging Modalities* Biomedical Engineering 358, *Medical Decision Making* Electrical Engineering 347, *Modern Optics* Electrical Engineering 351M, *Digital Signal Processing* Electrical Engineering 371R, *Digital Image and Video Processing* An approved upper-division biomedical engineering, electrical engineering, or physics course

#### **Career Emphasis B: Biomedical Instrumentation**

The main objective of this emphasis is to prepare students to design and use biomedical instrumentation for imaging, diagnostic, and therapeutic applications. A solid foundation, practical knowledge, and skills are established in analog and digital network analysis, software and hardware programming, electronic circuits, sensors, data acquisition systems, image and signal processing, and computational analysis of data as it applies to living systems.

While students are required to select 12 hours from any of the Technical Area 1 course options, the following are recommended for the biomedical instrumentation career emphasis:

Biomedical Engineering 354, *Molecular Sensors and Nanodevices for Biomedical Engineering Applications* 

Biomedical Engineering 374K, *Biomedical Instrument Design* Biomedical Engineering 374L, *Applications of Biomedical Instrumentation Lab* 

Electrical Engineering 312, Software Design and Implementation I Electrical Engineering 319K, Introduction to Embedded Systems Electrical Engineering 438, Fundamentals of Electronic Circuits I Laboratory Electrical Engineering 445L, Embedded Systems Design Laboratory Electrical Engineering 445M, Embedded and Real-Time Systems Laboratory Electrical Engineering 445S, Real-Time Digital Signal Processing Laboratory Electrical Engineering 351M, Digital Signal Processing

## Technical Area 2, Cellular and Biomolecular Engineering

The major objective of this area is to teach students how to integrate knowledge in cell and molecular biology with engineering analysis, so that they can address problems in molecular-based medicine. Two career emphases are available in this area: biomaterials/regenerative medicine and nanotechnology. Students are required to select 12 semester hours from any of the Technical Area 2 electives; six of the 12 hours must be within engineering.

## Career Emphasis A: Biomaterials/Regenerative Medicine

The objective of this emphasis is to prepare students for a career in biomaterials and regenerative medicine engineering. This emphasis includes solid foundation in cell and tissue engineering, biomaterials, and pharmacology. While students are required to select 12 hours from any of the Technical Area 2 course options, the following are recommended for the biomaterials/regenerative medicine career emphasis:

Biology 320, Cell Biology

Biology 325, Genetics Biology 326M, Introductory Medical Microbiology and Immunology Biomedical Engineering 339, Biochemical Engineering Biomedical Engineering 359, Cellular and Molecular Biomechanics Biomedical Engineering 366, Immune Engineering Biomedical Engineering 373, Tissue, Scaffold, and Cell Biomechanics Applications Biomedical Engineering 375, Stem Cells in Cell and Tissue Engineering Biomedical Engineering 376, Cell Engineering Biomedical Engineering 379, Tissue Engineering An approved topic of Chemical Engineering 379, Topics in Chemical Engineering Chemistry 320N, Organic Chemistry II and 220C, Organic Chemistry Laboratory; or 328N, Organic Chemistry II and 128L, Organic Chemistry Laboratory Pharmacy PharmD 338, Introduction to Pharmacology An approved upper-division biomedical engineering, chemical engineering or mechanical engineering course

#### Career Emphasis B: Nanotechnology

The objective of this emphasis is to prepare students for a career in nanotechnology. This emphasis includes solid foundation in nanodevices and sensors, biological physics, and nanocomposites. While students are required to select 12 hours from any of the Technical Area 2 course options, the following are recommended for the nanotechnology career emphasis:

Biomedical Engineering 346, *Computational Biomolecular Engineering* Biomedical Engineering 354, *Molecular Sensors and Nanodevices for Biomedical Engineering Applications* 

Biomedical Engineering 359, *Cellular and Molecular Biomechanics* Chemical Engineering 339P, *Introduction to Biological Physics* An approved topic of Chemical Engineering 379, *Topics in Chemical* 

Engineering Chemistry 320N, Organic Chemistry II and 220C, Organic Chemistry Laboratory; or 328N, Organic Chemistry II and 128L, Organic Chemistry Laboratory

An approved topic of Mechanical Engineering 379M, *Topics in Mechanical Engineering* 

An approved upper-division biomedical engineering, chemical engineering or mechanical engineering course

## Technical Area 3, Computational Biomedical Engineering

The objective of this area is to provide students with the knowledge and skills that will enable them to design and use computational algorithms to address problems in biomedical research and health care. Examples include (a) designing medical decision aids using statistical and machine learning models, (b) dynamic modeling and computer simulation to study the biomechanics and control of movement, (c) development of thermodynamic models of dynamic processes at the microscopic and macroscopic scales in biological systems, and (d) image processing techniques for quantitative measurement and interpretation of biomedical images. Students are required to select 12 semester hours from any of the Technical Area 3 electives; six of the 12 hours must be within engineering.

Students must select 12 hours from the following: Biomedical Engineering 345, Graphics and Visualization Laboratory Biomedical Engineering 346, Computational Biomolecular Engineering Biomedical Engineering 347, Fundamentals of Biomedical Optics Biomedical Engineering 348, Modeling of Biomedical Engineering Systems Biomedical Engineering 350, Computational Methods for Biomedical Engineers Biomedical Engineering 357, Biomedical Imaging Modalities Biomedical Engineering 358, Medical Decision Making Electrical Engineering 312, Software Design and Implementation I Electrical Engineering 319K, Introduction to Embedded Systems Electrical Engineering 422C, Software Design and Implementation II Electrical Engineering 360C, Algorithms Electrical Engineering 371R, Digital Image and Video Processing Mathematics 325K, Discrete Mathematics Mathematics 340L, Matrices and Matrix Calculations A computer science course from an approved list

#### **Technical Area 4, Biomechanics**

The major objective of this area is to provide students with knowledge of the structure and function of biological systems by means of the methods of mechanics. Students will learn skills to apply engineering principles to understand how living systems function at all scales of organization and to translate this understanding to the design of devices and procedures that will improve diagnostic and therapeutic methods in health care.

Students must select 12 hours from the following; six of the 12 hours must be within engineering:

Biomedical Engineering 342, *Biomechanics of Human Movement* Biomedical Engineering 346, *Computational Biomolecular Engineering*  Biomedical Engineering 347, *Fundamentals of Biomedical Optics* Biomedical Engineering 354, *Molecular Sensors and Nanodevices for Biomedical Engineering Applications* 

Biomedical Engineering 359, *Cellular and Molecular Biomechanics* Biomedical Engineering 362, *Introduction to Nonlinear Dynamics in Biological Systems* 

Biomedical Engineering 373, *Tissue, Scaffold, and Cell Biomechanics Applications* 

Chemical Engineering 339P, Introduction to Biological Physics Kinesiology 326K, Biomechanical Analysis of Movement Mechanical Engineering 314D, Dynamics

Mechanical Engineering 344, *Dynamic Systems and Controls* and 144L, *Dynamic Systems and Controls Laboratory* 

Mechanical Engineering 354, Introduction to Biomechanical Engineering Mechanical Engineering 372J, Robotics and Automation

An approved upper-division biomedical engineering or mechanical engineering course

# Suggested Arrangement of Courses

First Year		
First Term	Hours Second Term	Hours
BIO 311C	3 BME 303	3
BME 303L	3 CH 302	3
UGS 302 or 303	3 CH 204	2
BIO 206L	2 M 408D	4
CH 301	3 PHY 303K	3
M 408C	4 PHY 103M	1
	RHE 306	3
	18	19
Second Year		
First Term	Hours Second Term	Hours
BME 214L	2 BME 333T	3
CH 320M or 328M	3 BME 313L	3
CH 128K	1 BME 344	3
BME 311	3 BME 335	3
M 427J	4 BCH 369	3
PHY 303L	3	
PHY 103N	1	
	17	15
Third Year		
First Term	Hours Second Term	Hours
BME 245L	2 BME 261L	2
BME 343	3 BME 355	3
BME 352	3 BME 349	3
BME 365R	3 BME 365S	3
E 316L, 316M, 316N, or 316P	3 Technical area elective	3
Technical area elective	3 BME 353	3
	17	17
Fourth Year		
First Term	Hours Second Term	Hours
BME 370	3 BME 371	3
GOV 310L	3 GOV 312L or 312P	3
Technical area elective	3 Visual and performing arts	3
American history	3 Technical area elective	3
Social and behavioral sciences	3 American history	3
	15	15

Total credit hours: 133

# Bachelor of Science in Chemical Engineering

Chemical engineering is one of the most broadly-based engineering disciplines. Its field of practice covers the development, design, and control of processes and products that involve molecular change, both chemical and biological, and the operation of such processes. Because many of the products that sustain and improve life are produced by carefully designed and controlled molecular changes, the chemical engineer serves in a wide variety of industries. These industries range from chemical and energy companies to producers of all types of consumer and specialty products, pharmaceuticals, textiles, polymers, advanced materials, and solid-state and biomedical devices.

Careers are available in industry, government, consulting, and education. Areas of professional work include research and development, operations, technical service, product development, process and plant design, market analysis and development, process control, and pollution abatement.

The chemical engineering degree program prepares students for professional practice in chemically related careers after the bachelor's degree or an advanced degree. Chemical engineering graduates are expected to attain the following capabilities at or within a few years of graduation: apply the fundamentals of science and engineering to solve important chemical engineering problems in industry, government or academic settings; communicate effectively and demonstrate the interpersonal skills required to lead and/or participate in interdisciplinary projects; apply life-long learning to meet professional and personal goals of their chosen profession, including graduate study; articulate and practice professional, ethical, environmental and societal responsibilities, and value different global and cultural perspectives. To meet the program objective, the faculty has designed a rigorous, demanding, and state-ofthe-art curriculum that integrates lectures and laboratory experience in basic science, mathematics, engineering science, engineering design, and the liberal arts.

#### **Portable Computing Devices**

Students entering chemical engineering are required to have a laptop computer at their disposal. Laptops do not need to be brought to campus on a daily basis, but individual courses may require that a laptop be brought to certain lectures, labs, and/or exams. Minimum requirements for the laptop are listed on the department's website (https://che.utexas.edu/wp-content/wfcache/che.utexas.edu\_current-students/undergraduate-students~undergraduate-office~laptop-requirements~~\_wfcache.html\_gzip).

#### Curriculum

Course requirements are divided into three categories: lower-division courses in the major, upper-division courses in the major, and other required courses. Enrollment in some upper-division Chemical Engineering courses requires completion of eight hours of lower-division Chemical Engineering coursework (Chemical Engineering 210, 317 and 319) and 11 hours of non-Chemical Engineering coursework (Chemistry 328M, 128K, 353, Physics 303L and 103N) in the major, while earning a grade of *C*- or better in each course. In addition, each student must complete the University's core curriculum (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/core-curriculum). In some cases, a course required for the Bachelor of Science in Chemical Engineering may also be counted toward the core curriculum; these courses are identified below.

In the process of fulfilling engineering degree requirements, students must also complete coursework to satisfy the following flag

requirements: one independent inquiry flag, one course with a quantitative reasoning flag, one ethics flag, one global cultures flag, one cultural diversity in the United States flag, and two writing flags. The independent inquiry flag, the quantitative reasoning flag, the ethics flag, and the two writing flags are carried by courses specifically required for the degree; these courses are identified below. Courses that may be used to fulfill flag requirements (p. 23) are identified in the *Course Schedule* (http://registrar.utexas.edu/schedules).

Requirements		Hours	
Chemical Engineering Co	ourses		
CHE 210	Introduction to Computing		2
CHE 253K	Applied Statistics		2
CHE 253M	Measurement, Control, and Data Analysis Laboratory		2
CHE 264	Chemical Engineering Process and Projects Laboratory (writing flag)		2
CHE 317	Introduction to Chemical Engineering Analysis		3
CHE 319	Transport Phenomena		3
CHE 322	Thermodynamics		3
CHE 333T	Engineering Communication (writing flag; ethics flag)		3
CHE 338	Biochemical Engineering		3
CHE 348	Numerical Methods in Chemical Engineering and Problem Solving		3
CHE 350	Chemical Engineering Materials		3
CHE 354	Transport Processes		3
CHE 360	Process Control		3
CHE 363	Separation Processes and Mass Transfer		3
CHE 372	Chemical Reactor Analysis and Design		3
CHE 473K	Process Design and Operations (independent inquiry flag)		4
Chemistry			
CH 302	Principles of Chemistry II (part II science and technology; quantitative reasoning flag)		3
CH 204	Introduction to Chemical Practice (quantitative reasoning flag)		2
CH 128K	Organic Chemistry Laboratory		1
CH 328M	Organic Chemistry I		3
CH 353	Physical Chemistry I (quantitative reasoning flag)		3
Mathematics			
M 408C	Differential and Integral Calculus (mathematics; quantitative reasoning flag)		4
M 408D	Sequences, Series, and Multivariable Calculus		4
M 427J	Differential Equations with Linear Algebra (quantitative reasoning flag)		4
M 427L	Advanced Calculus for Applications II		4
Physics			
PHY 103M	Laboratory for Physics 303K		1
PHY 103N	Laboratory for Physics 303L		1

РНҮ 303К	Engineering Physics I (part I science and technology; quantitative reasoning flag)	3
PHY 303L	Engineering Physics II (part I science and technology; quantitative reasoning flag)	3
Rhetoric and Writing		
RHE 306	Rhetoric and Writing (English composition)	3
Other Required Courses		
Approved technical focus	s area electives in engineering	6
Approved technical focus	s area electives	6
CH 128L	Organic Chemistry Laboratory	1
CH 328N	Organic Chemistry II	3
CH 153K	Physical Chemistry Laboratory (writing flag)	1
Chemistry elective with a online course) chosen fre	l laboratory experience (not an om	4
CH 431	Inorganic Chemistry	
CH 354 & CH 154K	Quantum Chemistry and Spectroscopy and Physical Chemistry Laboratory	
CH 354L & CH 154K	Physical Chemistry II and Physical Chemistry Laboratory	
CH 455	Fundamentals of Analytical Chemistry	
BCH 369 & CHE 177K	Fundamentals of Biochemistry and Undergraduate Research Project	
BCH 369 & CHE 177L	Fundamentals of Biochemistry and Undergraduate Research Project	
CH 354 & CHE 177K	Quantum Chemistry and Spectroscopy and Undergraduate Research Project	
CH 354 & CHE 177L	Quantum Chemistry and Spectroscopy and Undergraduate Research Project	
Remaining Core Curricul	um Courses	
E 316L	British Literature <sup>1</sup>	3
or E 316M	American Literature	
or E 316N	World Literature	
or E 316P	Masterworks of Literature	
American and Texas gov	ernment <sup>2</sup>	6
American history <sup>2</sup>		6
Visual and performing ar	ts <sup>3</sup>	3
Social and behavioral sci	ences <sup>3</sup>	3
UGS 302	First-Year Signature Course <sup>4</sup>	3
or UGS 303	First-Year Signature Course	
1 Some sections of the l	English humanities courses (F 316	

1. Some sections of the English humanities courses (E 316L, 316M, 316N, 316P) carry a global cultures or cultural diversity flag.

2. Some sections carry a cultural diversity flag.

3. Some sections carry a global cultures and/or cultural diversity flag.

4. In UGS 302, all sections carry a writing flag. In UGS 303, some sections carry a writing flag.

Total Hours

#### **Honors Program**

Chemical engineering students who are in the Engineering Honors Program and maintain a grade point average of at least 3.50 may take the honors research course, Chemical Engineering 679H. In this course the student performs research over two consecutive semesters under the supervision of a faculty member, makes two oral presentations, and writes a thesis. Chemical Engineering 679H may be used to fulfill either the approved area electives requirement or the approved area electives in chemical engineering requirement.

129

### **Technical Option Areas**

Because of the broad training in natural sciences and engineering received by the chemical engineer, opportunities are provided for students also to develop particular talents and interests in one or two areas of emphasis. Each student must complete 12 semester hours in one of the following areas or six semester hours in each of two areas. These courses must include at least two engineering courses, of which one must be in Chemical Engineering. If two technical option areas are selected, then two courses from each technical option area should be completed. The technical area courses should be discussed with a faculty adviser during faculty advising for the next registration period. The courses listed in each area do not constitute a complete list of technical option area courses but illustrate the types of courses that are generally suitable for a given area. A list of suggested complementary biology, physics, mathematics, and chemistry electives for each of the technical option areas is available from the Chemical Engineering Undergraduate Office and published on the departmental Web page.

Students who are interested in seeking an advanced degree in chemical engineering are encouraged to discuss their plans with the graduate adviser or another faculty member. They should also inquire about undergraduate research positions in the department.

For all areas, Chemical Engineering 325L and 377K may be counted as chemical engineering electives. Chemical Engineering 377K may be counted only once toward the degree.

#### Area 1, Process Systems and Product Engineering

The chemical process industry is one of the most advanced in the applications of modern design and control techniques and computer technology. Competence in design, economics, fault detection, optimization, control, and simulation is essential in this industry. Chemical engineers are also frequently involved in the development of new consumer and specialty products, an assignment that requires not only technical skills but also an understanding of the principles of successful marketing and quality control. Chemical engineering courses in this technical focus area cover topics such as optimization and statistical quality control, while courses in mechanical engineering and electrical engineering deal with both theory and applications in statistics, computer control, economic analysis, and operations research.

Chemical Engineering 341, Design for Environment Chemical Engineering 342, Chemical Engineering Economics and Business Analysis Chemical Engineering 356, Optimization: Theory and Practice Chemical Engineering 376K, Process Evaluation and Quality Control

Chemical Engineering 376K, Process Evaluation and Quality Contro Chemical Engineering 379, Topics in Chemical Engineering\* Electrical Engineering 370K, Computer Control Systems Electrical Engineering 379K\* Architectural Engineering 323K, Project Management and Economics Mechanical Engineering 335, Engineering Statistics Mechanical Engineering 348F, Advanced Mechatronics II Mechanical Engineering 353, Engineering Finance Mechanical Engineering 366L, Operations Research Models Marketing 320F, Foundations of Marketing Upper-division mathematics course

\*Approved topics

#### Area 2, Materials Engineering

Advances in technology and improvements in our quality of life are linked to the development, processing, and manufacture of engineering materials. Materials span the spectrum from "hard" to "soft" materials and include metals, ceramics, semiconductors, and polymers; all are prepared in carefully controlled chemical processes. These materials are used technologically in objects such as catalysts, fuel cells, microelectronic devices, membranes, solar cells, and high-performance plastics. With advancements in analytical probes and modeling, our understanding of materials has become increasingly more molecular and the traditional boundaries between disciplines have faded to the extent that this is a truly interdisciplinary area. Chemical engineers can assume a creative role in this area when provided with the appropriate fundamentals and applications background.

Chemical Engineering 322M, Molecular Thermodynamics Chemical Engineering 323, Chemical Engineering for Micro- and Nanofabrication Chemical Engineering 355, Introduction to Polymers Chemical Engineering 379\* Chemistry 341, Special Topics in Laboratory Chemistry Chemistry 354, Quantum Chemistry and Spectroscopy Chemistry 354L, Physical Chemistry II Chemistry 367L, Macromolecular Chemistry Chemistry 376K, Advanced Analytical Chemistry Electrical Engineering 339, Solid-State Electronic Devices Mechanical Engineering 349, Corrosion Engineering Mechanical Engineering 359, Materials Selection Mechanical Engineering 374S, Solar Energy Systems Design Physics 338K, Electronic Techniques Physics 355, Modern Physics and Thermodynamics Physics 375S, Introductory Solid-State Physics

\*Approved topics

#### Area 3, Environmental Engineering

Chemical engineers are uniquely qualified to contribute to the solution of environmental problems and to design processes and products that minimize environmental hazards. From pollution prevention by process optimization, to new understanding of chemical processes that occur in the environment, to new materials for advanced catalysts and carbon-free energy sources, chemical engineers are creating the "green" technologies needed to sustain the planet.

Chemical Engineering 341, Design for Environment

Chemical Engineering 357, Technology and Its Impact on the Environment Chemical Engineering 359, Energy Technology and Policy Chemical Engineering 376K, Process Evaluation and Quality Control Chemical Engineering 379\*

Civil Engineering 341, Introduction to Environmental Engineering

Civil Engineering 342, Water and Wastewater Treatment Engineering

Civil Engineering 364, *Design of Wastewater and Water Treatment Facilities* Civil Engineering 369L, *Air Pollution Engineering* 

Civil Engineering 370K, *Environmental Sampling and Analysis* Mechanical Engineering 374S, *Solar Energy Systems Design*  Mechanical Engineering 379M, Topics in Mechanical Engineering

\*Approved topics

## Area 4, Biochemical, Biomolecular, and Biomedical Engineering

#### Track A: Cellular and Bioprocess Engineering

Chemical engineers are developing innovative solutions to practical problems in biotechnology and in the biochemical, pharmaceutical, and life science industries. This track is designed to prepare students for a career or research in the areas of applied cellular engineering and bioprocess engineering in the chemicals and pharmaceutical industry. Chemical engineering and elective courses are available that cover chemical engineering principles applied to biological systems and the fundamentals of biomolecular, cellular, and metabolic processes. This track is also suitable for students interested in biofuels.

Chemical Engineering 339, Introduction to Biochemical Engineering Chemical Engineering 339P, Introduction to Biological Physics Chemical Engineering 379\* Biochemistry 369, Fundamentals of Biochemistry Biochemistry 370, Physical Methods of Biochemistry Biology 325, Genetics Biology 326R, General Microbiology Biology 339, Metabolism and Biochemistry of Microorganisms

\*Approved topics

#### **Track B: Biomedical Engineering**

This track is designed to prepare students for careers in the biomedical and pharmaceutical industries that deal with medical systems or improvement of health treatment alternatives. This is also a natural track to be followed by students who plan to attend medical school. Chemical engineering courses and electives are available that cover the application of chemical engineering principles to the design of new medical and therapeutic devices, as well as to the understanding of physiological processes.

Chemical Engineering 339, Introduction to Biochemical Engineering Chemical Engineering 339P, Introduction to Biological Physics Chemical Engineering 339T, Cell and Tissue Engineering Chemical Engineering 355, Introduction to Polymers Chemical Engineering 379\* Biology 320, Cell Biology Biology 325, Genetics Biology 326R, General Microbiology Biology 365S, Human Systems Physiology Biomedical Engineering 352, Engineering Biomaterials Biomedical Engineering 353, Transport Phenomena in Living Systems Biomedical Engineering 365R, Quantitative Engineering Physiology I Biochemistry 369, Fundamentals of Biochemistry Electrical Engineering 374K, Biomedical Electronic Instrument Design Mechanical Engineering 354, Introduction to Biomechanical Engineering

\*Approved topics

#### Area 5, Energy Technologies

The need for energy sustainability and new energy technologies provides some of the most significant scientific and engineering challenges that face society. Chemical engineers are uniquely qualified to address these issues and contribute new solutions to the problem. Technologies include solar energy utilization in the form of photovoltaics, biofuels and solar fuels; new and more efficient ways to extract fossil fuels from existing reservoirs; alternative power sources like wind, geothermal, and nuclear. Policy is also an important and active area that involves chemical engineers. Chemical engineering and other elective courses are available that teach fundamentals of energy technology and policy.

Chemical Engineering 323, Chemical Engineering for Micro- and Nanofabrication

Chemical Engineering 339, Introduction to Biochemical Engineering

Chemical Engineering 341, Design for Environment

Chemical Engineering 355, Introduction to Polymers

Chemical Engineering 357, Technology and Its Impact on the Environment

Chemical Engineering 359, *Energy Technology and Policy* Chemical Engineering 379\*

Civil Engineering 341, Introduction to Environmental Engineering Electrical Engineering 339, Solid-State Electronic Devices Mechanical Engineering 374S, Solar Energy Systems Design Mechanical Engineering 379M, Topics in Mechanical Engineering Petroleum and Geosystems Engineering 305, Energy and the Environment Petroleum and Geosystems Engineering 430, Drilling and Well Completions

\*Approved topics

## Area 6, Engineering Economics and Business Leadership

Chemical engineers who understand the economic and policy issues faced by modern chemical and materials companies are needed to solve the challenges of modern industry. Globalization, sustainability, safety and modern labor practices, intellectual property protection, and the process of innovation are all issues facing modern industry. This focus area is designed to prepare students for business leadership in a technical arena.

Chemical Engineering 342, *Chemical Engineering Economics and Business Analysis* 

Chemical Engineering 356, Optimization: Theory and Practice Chemical Engineering 379, Topics in Chemical Engineering\* Architectural Engineering 323K, Project Management and Economics Economics 304K, Introduction to Microeconomics Economics 304L, Introduction to Macroeconomics Economics 328, Industrial Organization Economics 328, Industrial Organization Economics 339K, International Trade and Investment Economics 351K, Current Issues in Business Economics International Business 378, International Business Operations Mechanical Engineering 353, Engineering Finance Mechanical Engineering 366L, Operations Research Models Marketing 320F, Foundations of Marketing Marketing 460, Information and Analysis Science, Technology, and Society 332, The Nanotechnology and Science Revolution

\*Approved topics

### Suggested Arrangement of Courses

First Year		
First Term	Hours Second Term	Hours
CH 302	3 CH 204	2
CHE 102 <sup>1</sup>	1 M 408D	4
CHE 210	2 PHY 303K	3
M 408C	4 PHY 103M	1
RHE 306	3 UGS 302 or 303	3
Social and behavioral sciences	3 American and Texas government	3
	16	16

Second Year		
First Term	Hours Second Term	Hours
CH 128K	1 CH 128L	1
CH 328M	3 CH 328N	3
CHE 317	3 CH 353	3
M 427J	4 CHE 319	3
PHY 303L	3 E 316L, 316M, 316N, or 316P	3
PHY 103N	1 M 427L	4
	15	17
Third Year		
First Term	Hours Second Term	Hours
CH 153K	1 CHE 253M	2
CHE 322	3 CHE 363	3
CHE 333T	3 CHE 348	3
CHE 253K	2 CHE 338	3
CHE 354	3 American history	3
Chemistry elective	4 Visual and performing arts	3
	16	17
Fourth Year		
First Term	Hours Second Term	Hours
CHE 350	3 CHE 360	3
CHE 264	2 CHE 473K	4
CHE 372	3 American history	3
Approved engineering area course	3 Approved engineering area course	3
American and Texas government	3 Approved technical area course	3
Approved technical area course	3	
	17	16

Total credit hours: 130

1

Optional; students who do not take this course will take 15 hours of coursework in the fall semester of the first year. Actual credit hours for the degree is 129.

# Bachelor of Science in Civil Engineering

Civil engineers design, construct, operate and maintain the physical fabric of society. In doing so, civil engineers work toward continuous improvement of the human condition and natural environment, tackling many of the grand challenges that face humankind today. Much of the work of civil engineers is highly visible, such as roadways, bridges, airports, levees, buildings, bike paths, and city parks, while other parts are rarely seen but equally vital to the health of communities, such as the water and wastewater treatment, distribution, and collection systems or the energy infrastructure. Civil engineers keep human beings safe by designing resilient infrastructure that does not fail in extraordinary events, but that is also socially, economically, and environmentally sustainable.

The civil engineering student has the opportunity to obtain a broad background in mathematics and the physical sciences and their applications to all areas of civil engineering. This flexible curriculum allows the student to elect 18 semester hours of approved technical coursework to emphasize the areas of civil engineering of most interest to the student. In addition, courses in the humanities and social sciences are included.

To excel as a civil engineer, a student should have an aptitude for mathematics and science, an interest in the practical application of technical knowledge to societal problems, the motivation to study and prepare for engineering practice, the desire to be a professional, and a desire to work with others to better the lives of humankind. Civil engineering graduates of the University may seek a wide variety of positions in planning, design, and construction with government agencies, industry, and private consulting firms. Those who plan to pursue graduate work in engineering, or in other professions such as business, medicine, law, or journalism, have an excellent base on which to build.

#### **Student Outcomes**

Graduates of the civil engineering program should attain the following outcomes:

- An ability to apply knowledge of mathematics, science, and engineering
- An ability to design and conduct experiments, as well as to analyze and interpret data
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- · An ability to function on multidisciplinary teams
- · An ability to identify, formulate, and solve engineering problems
- · An understanding of professional and ethical responsibility
- · An ability to communicate effectively
- The broad education necessary to understand what impact engineering solutions have in global, economic, environmental, and societal contexts
- Recognition of the need for and an ability to engage in lifelong learning
- Knowledge of contemporary issues
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

#### **Program Educational Objectives**

Graduates of the civil engineering program should solve civil engineering problems within a greater societal context. They should:

- Exhibit character and decision-making skills embodying professionalism and ethical behavior
- Apply knowledge, strong reasoning, and quantitative skills to design and implement creative and sustainable solutions
- Engage in lifelong learning to meet evolving engineering challenges facing society
- Exhibit strong communication, critical thinking, interpersonal, and management skills as leaders and contributors in the civil engineering profession

#### **Portable Computing Devices**

Students entering Civil Engineering are required to have a laptop at their disposal. Laptops do not need to be brought to campus on a daily basis, but individual courses may require that a laptop be brought to class or lab sessions. For a list of minimum system requirements see: www.caee.utexas.edu/students/itss.

#### Curriculum

Course requirements include courses within the Cockrell School of Engineering and other required courses. In addition, each student must complete the University's core curriculum (p. 23). In some cases, a course required for the Bachelor of Science in Civil Engineering may also be counted toward the core curriculum; these courses are identified below.

In the process of fulfilling engineering degree requirements, students must also complete coursework to satisfy the following flag requirements: one independent inquiry flag, one quantitative reasoning flag, one ethics flag, one global cultures flag, one cultural diversity in the US flag, and two writing flags. The independent inquiry flag, the quantitative reasoning flag, the ethics flag and one writing flag are carried by courses specifically required for the degree; these courses are identified below. Students are advised to fulfill the second writing flag requirement with a course that meets another requirement of the core curriculum. Courses that may be used to fulfill flag requirements (p. 23) are identified in the *Course Schedule* (http://registrar.utexas.edu/ schedules).

····,			
Requirements		Hours	
<b>Civil Engineering Courses</b>	5		
C E 301	Civil Engineering Systems	3	3
C E 311K	Introduction to Computer Methods	3	3
C E 311S	Probability and Statistics for Civil Engineers	3	3
C E 319F	Elementary Mechanics of Fluids	Э	3
C E 321	Transportation Systems <sup>1</sup>	Э	3
C E 324P	Properties and Behavior of Engineering Materials <sup>1</sup>	3	3
C E 329	Structural Analysis <sup>1</sup>	Э	3
C E 333T	Engineering Communication (writing flag; ethics flag)	Э	3
C E 341	Introduction to Environmental Engineering <sup>1</sup>	3	3
C E 356	Elements of Hydraulic Engineering <sup>1</sup>	Э	3
C E 357	Geotechnical Engineering <sup>1</sup>	Э	3
C E 370P	Engineering Professionalism	Э	3
Architectural Engineering	l i i i i i i i i i i i i i i i i i i i		
ARE 323K	Project Management and Economics <sup>1</sup>	3	3
Chemistry			
CH 301	Principles of Chemistry I (part I science and technology)	3	3
CH 302	Principles of Chemistry II (part I science and technology)	3	3
Engineering Mechanics			
E M 306	Statics	Э	3
E M 319	Mechanics of Solids	Э	3
Mathematics			
M 408C	Differential and Integral Calculus (mathematics; quantitative reasoning flag)	4	1
M 408D	Sequences, Series, and Multivariable Calculus	4	1
M 427J	Differential Equations with Linear Algebra (quantitative reasoning flag)	4	1
or M 427K	Advanced Calculus for Applications	I	
Mechanical Engineering			
M E 210	Engineering Design Graphics	2	2
Physics			
PHY 103M	Laboratory for Physics 303K	1	
PHY 103N	Laboratory for Physics 303L	1	1
РНҮ 303К	Engineering Physics I (part II science and technology)	3	}
PHY 303L	Engineering Physics II	3	3
Other Required Courses			
E M 311M	Dynamics	3	3

or M E 310T	Applied Thermodynamics	
Approved science elect	ve	3
Technical Electives (som inquiry flag)	ne courses carry an independent	18
Remaining Core Curricu	lum Courses	
RHE 306	Rhetoric and Writing (English Composition)	3
E 316L	British Literature <sup>2</sup>	3
or E 316M	American Literature	
or E 316N	World Literature	
or E 316P	Masterworks of Literature	
American and Texas go	vernment <sup>3</sup>	6
American history <sup>3</sup>		6
Social and behavioral s	cience <sup>4</sup>	3
Visual and performing a	irts <sup>4</sup>	3
UGS 302	First-Year Signature Course <sup>5</sup>	3
or UGS 303	First-Year Signature Course	
1. Base Level course		

2. Some sections of the English humanities courses (E 316L, 316M, 316N, 316P) carry a global cultures or cultural diversity flag. 3. Some sections carry a cultural diversity flag.

4. Some sections carry a global cultures and/or cultural diversity flag.

5. In UGS 302, all sections carry a writing flag. In UGS 303, some sections carry a writing flag.

**Total Hours** 

**Technical Electives** 

The civil engineering curriculum does not require the student to declare a specific technical area option. However, for the guidance of students with particular interests, technical electives in civil engineering are listed in areas of specialization. The 18 semester hours of technical electives must be chosen from the following civil engineering and architectural engineering courses; in special cases, with the written permission of the department chair, this requirement may be relaxed, provided the student demonstrates in advance that the courses to be substituted for civil engineering or architectural engineering courses are part of a consistent educational plan. To provide a broad general background, at least one technical elective from each of three different areas of specialization must be included in each student's program.

One, three hour course, from the approved list of math/science/ engineering electives may be substituted for a technical elective. This course does not count towards the three different area breadth requirements. The current approved list is available in the departmental undergraduate office.

The following lists reflect current course offerings and are subject to change by the faculty. Current lists are available in the departmental undergraduate office.

#### **Technical Elective**

Construction Engineering and Project Management

Architectural Engineering 335, Materials and Methods of Building Construction

Architectural Engineering 358, Cost Estimating in Building Construction Architectural Engineering 366, Contracts, Liability, and Ethics (carries an ethics flag)

Architectural Engineering 376, Building Information Modeling for Capital Projects

Infrastructure Materials Engineering Civil Engineering 351, Concrete Materials Civil Engineering 366K, Design of Bituminous Mixtures

Environmental Engineering

Civil Engineering 342, Water and Wastewater Treatment Engineering Civil Engineering 346, Solid Waste Engineering and Management Civil Engineering 364, Design of Wastewater and Water Treatment Facilities (carries an independent inquiry flag) Civil Engineering 369L, Air Pollution Engineering Civil Engineering 369R, Indoor Air Quality Civil Engineering 370K, Environmental Sampling and Analysis

Geotechnical Engineering

Civil Engineering 360K, Foundation Engineering (carries an independent inquiry flag)

Civil Engineering 375, Earth Slopes and Retaining Structures

#### Structural Engineering

Architectural Engineering 345K, Masonry Engineering Architectural Engineering 362L, Structural Design in Wood Civil Engineering 331, Reinforced Concrete Design Civil Engineering 335, Elements of Steel Design Civil Engineering 362M, Advanced Reinforced Concrete Design (carries an independent inquiry flag) Civil Engineering 362N, Advanced Steel Design (carries an independent inquiry flag) Civil Engineering 363, Advanced Structural Analysis

#### Transportation Engineering

124

Civil Engineering 367G, Design and Evaluation of Ground-Based Transportation Systems (carries an independent inquiry flag) Civil Engineering 367P, Pavement Design and Performance Civil Engineering 367T, Traffic Engineering Civil Engineering 367R, Optimization Techniques for Transportation Engineers Civil Engineering 358, Introductory Ocean Engineering Civil Engineering 365K, Hydraulic Engineering Design (carries an independent inquiry flag) Civil Engineering 374K, Hydrology

Civil Engineering 374L, Groundwater Hydraulics

### Suggested Arrangement of Courses

First Year		
First Term	Hours Second Term	Hours
C E 301	3 CH 302	3
CH 301	3 M E 210	2
M 408C	4 M 408D	4
RHE 306	3 PHY 303K	3
UGS 302 or 303	3 PHY 103M	1
	Social and behavioral sciences or visual and performing arts (may be taken in any semester)	3
	16	16
Second Year		
First Term	Hours Second Term	Hours
C E 311K	3 C E 311S	3
E M 306	3 E M 319	3
M 427J or 427K	4 C E 319F	3
PHY 303L	3 C E 333T	3

PHY 103N

 American history (may be taken in any semester)

3

American history (may be taken in any semester)

	17	15
Third Year		
First Term	Hours Second Term	Hours
C E 324P	3 E M 311M or M E 320	3
Base level course	3 Base level course	3
Base level course	3 Base level course	3
Base level course	3 Base level course	3
E 316L, 316M, 316N, or 316P	3 Social and behavioral sciences or visual and performing arts (may be taken in any semester)	3
	15	15
Fourth Year		
First Term	Hours Second Term	Hours
Technical Elective	3 C E 370P	3
Technical Elective	3 Technical Elective	3
Technical Elective	3 Technical Elective	3
Approved science elective (may be taken in any semester)	3 Technical Elective	3
American and Texas government (may be taken in any semester)	3 American government (may be taken in any semester)	3
	15	15

3

Total credit hours: 124

### Bachelor of Science in Computational Engineering

Computational engineering is a relatively new field in engineering that recognizes the increasing demand for advanced computational methods in engineering practice. Computational engineering in this context refers to the study and development of computer algorithms that translate mathematical and physical descriptions of engineering problems into languages that computers can process. This emphasis distinguishes computational engineering from computer science and computer engineering. Computational engineers must have basic knowledge of fundamental engineering and science, with more advanced knowledge of mathematics, algorithms and computer languages. Because of their extensive education in these disciplines, computational engineers can work in a variety of areas.

The objectives of the computational engineering degree program are to prepare students for professional practice in engineering; to prepare students for such post-baccalaureate study as their aptitudes and professional goals may dictate; to instill in students a commitment to lifelong education and to ethical behavior throughout their professional careers; and to make students aware of the global and societal effects of technology. To meet these objectives, the faculty has designed a rigorous curriculum that emphasizes fundamentals in the basic sciences and the humanities, integrates classroom and laboratory experiences in engineering, with advanced instruction in mathematics, statistics and computational science. The curriculum requires students to use modern engineering tools and computer technology, to work individually, and to practice teamwork.

The first two years of the computational engineering curriculum emphasize fundamental material along with engineering sciences, while the third and fourth years provides further depth in mathematics, algorithms, computer languages, and experimentation. The major offers technical electives in the third and fourth years where students may choose an industrial track or a post-baccalaureate track. The industrial track focuses on the applications of computer methods in industry, while the post-baccalaureate track prepares students for graduate study and research.

### Program Outcomes

Computational engineering graduates should demonstrate:

- An ability to apply knowledge of mathematics, science, and engineering
- An ability to design and conduct experiments, as well as analyze and interpret data
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- · An ability to function on multidisciplinary teams
- An ability to identify, formulate, and solve engineering problems
- · An understanding of professional and ethical responsibility
- An ability to communicate effectively
- The broad education necessary to understand what impact engineering solutions have in global, economic, environmental, and societal contexts
- A recognition of the need for and an ability to engage in lifelong learning
- A knowledge of contemporary issues
- An ability to use techniques, skills, and modern engineering tools necessary for engineering practice

### **Program Educational Objectives**

Within a few years of graduation, computational engineering graduates should:

- Contribute to the economic development of Texas and beyond through the ethical practice of computational engineering in industry and public service
- Exhibit leadership in technical or business activity through engineering ability, communication skills, and knowledge of contemporary and global issues
- Continue to educate themselves through professional study and personal research
- Be prepared for admission to, and to excel in, the best graduate programs in the world
- Use their engineering ability and creative potential to create technology that will improve the quality of life in society

#### **Portable Computing Devices**

Students entering computational engineering are required to have access to a portable computing device capable of running the software tools required for undergraduate engineering analyses (MATLAB, SOLIDWORKS, Word, Excel, etc.) and accessing to the remote server for the department. This device does not need to be brought to campus on a daily basis, but individual courses may require that the device be brought to certain lectures, labs, and/or exams. Minimum and recommended specifications may be found on the department website.

#### Curriculum

Course requirements include courses within the Cockrell School of Engineering and other required courses. In addition, each student must complete the University's Core Curriculum (http://catalog.utexas.edu/ undergraduate/undergraduate-studies/academic-policies-andprocedures/#corecurriculum). In some cases, a course that fulfills one of the following requirements may also be counted toward core curriculum or flag requirements; these courses are identified below.

In the process of fulfilling engineering degree requirements, students must also complete coursework to satisfy the following flag requirements: one independent inquiry flag, one quantitative reasoning flag, one ethics flag, one global cultures flag, one cultural diversity in the United States flag, and two writing flags. The independent inquiry flag, the quantitative reasoning flag, the ethics flag, and both writing flags are carried by courses specifically required for the degree; these courses are identified below. Courses that may be used to fulfill flag requirements (http://catalog.utexas.edu/undergraduate/undergraduate-studies/ academic-policies-and-procedures/#skillsandexperienceflags) are identified in the *Course Schedule* (http://registrar.utexas.edu/schedules).

Courses used to fulfill technical elective requirements must be approved by the computational engineering faculty before the student enrolls in them.

The student must take all courses required for the degree on the lettergrade basis and must earn a grade of at least *C*- in each course, except for those listed as Remaining Core Curriculum Courses. He or she must also maintain grade point averages of at least 2.00 in the major area of study and in required technical courses as described in Academic Standards (http://catalog.utexas.edu/undergraduate/engineering/ academic-policies-and-procedures/#academicstandards), and a cumulative University grade point average of at least 2.00 as described in *General Information* (http://catalog.utexas.edu/general-information/ academic-policies-and-procedures/scholastic-probation-and-dismissal).

Requirements		Hours	
<b>Computational Engineer</b>	ing Courses		
COE 301	Introduction to Computer Programming		3
COE 311K	Engineering Computation		3
COE 321K	Computational Methods for Structural Analysis		3
COE 322	Scientific Computation		3
COE 332	Software Engineering and Design		3
COE 347	Introduction to Computational Fluid Dynamics		3
COE 352	Advanced Scientific Computation		3
COE 371	Applied Mathematics I		3
COE 372	Applied Mathematics II		3
COE 374	Senior Design Project (writing flag and independent inquiry flag)		3
Aerospace Engineering			
ASE 320	Low-Speed Aerodynamics		3
ASE 330M	Linear System Analysis		3
ASE 333T	Engineering Communication (writing flag and ethics flag)		3
ASE 375	Electromechanical Systems		3
Chemistry			
CH 301	Principles of Chemistry I (part II science and technology)		3
Engineering Mechanics			
E M 306	Statics		3
E M 311M	Dynamics		3
E M 319	Mechanics of Solids		3
Mathematics			

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I science and technology; quantitative reasoning flag)         Other required courses         Approved technical electives       9         Rhetoric and Writing       9         Rhetoric and Writing       8         RHE 306       Rhetoric and Writing (English composition)       3         Remaining Core Curriculum Courses         E 316L       British Literature <sup>1</sup> 3         or E 316M       American Literature       3         or E 316N       World Literature       6         American and Texas government <sup>2</sup> 6         American history <sup>2</sup> 6         Social and behavioral sciences <sup>3</sup> 3         UGS 302       First-Year Signature Course <sup>4</sup> or UGS 303       First-Year Signature Course <sup>4</sup> or UGS 303       First-Year Signature Course          1.         1. Some sections of the English humanities courses (E 316L, 316M, 316N, 316P) carry a global cultures or cultural diversity flag.         2. Some sections carry a cultural diversity flag.         3. Some sections carry a dlobal cultures and/or cultural diversity flag.         3. Some sections carry a writing flag; in UGS 303, some sections carry a writing flag.         1. In UGS 302, all sections carry a writing flag.         3. Total Hours <td< td=""><td>РНҮ 303К</td><td>I science and technology;</td><td>3</td></td<>	РНҮ 303К	I science and technology;	3
Approved technical electives       9         Rhetoric and Writing       Rhetoric and Writing (English composition)       3         Remaining Core Curriculum Courses       5         E 316L       British Literature 1       3         or E 316M       American Literature or E 316N       World Literature or E 316P       Masterworks of Literature         American and Texas government 2       6         American history 2       6         Social and behavioral sciences 3       3         Visual and performing arts 3       3         UGS 302       First-Year Signature Course 4       3         or UGS 303       First-Year Signature Course 5       4         Some sections carry a global cultures or cultural diversity flag.       3       3         3. Some sections carry a ultural diversity flag.       3       3         3. Some sections carry a writing flag; in UGS 303, some sections carry a writing flag.       3         3.	PHY 303L	I science and technology;	3
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or E 316P       Masterworks of Literature         American and Texas government <sup>2</sup> 6         American history <sup>2</sup> 6         Social and behavioral sciences <sup>3</sup> 3         Visual and performing arts <sup>3</sup> 3         UGS 302       First-Year Signature Course <sup>4</sup> or UGS 303       First-Year Signature Course             1. Some sections of the English humanities courses (E 316L, 316M, 316N, 316P) carry a global cultures or cultural diversity flag.         2. Some sections carry a global cultures or cultural diversity flag.         3. Some sections carry a global cultures and/or cultural diversity flag.         4. In UGS 302, all sections carry a writing flag; in UGS 303, some sections carry a writing flag.         Total Hours       122         Suggested Arrangement of	or E 316M	American Literature	
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<ul> <li>316M, 316N, 316P) carry a global cultures or cultural diversity flag.</li> <li>2. Some sections carry a cultural diversity flag.</li> <li>3. Some sections carry a global cultures and/or cultural diversity flag.</li> <li>4. In UGS 302, all sections carry a writing flag; in UGS 303, some sections carry a writing flag.</li> <li>Total Hours</li> <li>Total Hours</li> <li>122</li> </ul>	or UGS 303	First-Year Signature Course	
<ul> <li>316M, 316N, 316P) carry a global cultures or cultural diversity flag.</li> <li>2. Some sections carry a cultural diversity flag.</li> <li>3. Some sections carry a global cultures and/or cultural diversity flag.</li> <li>4. In UGS 302, all sections carry a writing flag; in UGS 303, some sections carry a writing flag.</li> <li>Total Hours</li> <li>Total Hours</li> <li>122</li> </ul>			
<ul> <li>3. Some sections carry a global cultures and/or cultural diversity flag.</li> <li>4. In UGS 302, all sections carry a writing flag; in UGS 303, some sections carry a writing flag.</li> <li>Total Hours 122</li> <li>Suggested Arrangement of</li> </ul>	316M, 316N, 316P) ca		
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some sections carry a writing flag. Total Hours 122 Suggested Arrangement of		y a global cultures and/or cultural	
Suggested Arrangement of			
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First Year		
First Term	Hours Second Term	Hours
UGS 302 or 303	3 COE 301	3
CH 301	3 M 408D	4

M 408C	4 PHY 303K	3
RHE 306	3 PHY 103M	1
Social and behavioral sciences or visual and performing arts	3 M E 210	2
	American history	3
	16	16
Second Year		
First Term	Hours Second Term	Hours
E M 306	3 COE 311K	3
COE 322	3 COE 332	3
M 427J or 427K	4 E M 311M	3
PHY 303L	3 M 427L	4
PHY 103N	1 American and Texas government	3
M E 310T	3	
	17	16
Third Year		
First Term	Hours Second Term	Hours
ASE 320	3 ASE 330M	3
ASE 333T	3 COE 321K	3
COE 352	3 COE 347	3
E M 319	3 E 316L, 316M, 316N, or 316P	3
M 362K	3 Technical elective	3
	15	15
Fourth Year		
First Term	Hours Second Term	Hours
ASE 375	3 COE 372	3
COE 371	3 COE 374	3
Technical elective	3 American history	3
American and Texas government	3 Technical elective	3
Social and behavioral sciences or visual and performing arts	3	
	15	12
Total credit hours: 122		

Total credit hours: 122

# Bachelor of Science in Electrical Engineering

Students seeking the Bachelor of Science in Electrical Engineering pursue one of two curricula—electrical engineering or computer engineering. Both curricula contain the fundamentals of electrical engineering and computer engineering; they differ in technical core requirements in order to suit different career objectives.

The curricula in electrical engineering and computer engineering are designed to educate students in the fundamentals of engineering, which are built upon a foundation of mathematics, science, communication, and the liberal arts. Graduates should be equipped to advance their knowledge while contributing professionally to a rapidly changing technology. Areas in which electrical and computer engineers contribute significantly are: communications, signal processing, networks and systems, electronics and integrated circuits, energy systems and renewable energy, fields, waves and electromagnetic systems, nanoelectronics and nanotechnology, computer architecture and embedded systems, and software engineering and design. Typical career paths of graduates include design, development, management, consulting, teaching, and research. Many graduates seek further education in law, medicine, business, or engineering.

The core requirements of the Bachelor of Science in Electrical Engineering provide a foundation of engineering fundamentals. Students then build on the core requirements by choosing an advanced technical component and a set of free electives from within or outside of the department. Once the technical core area is chosen, the student is assigned a faculty adviser with expertise in that area to help the student select technical core courses that are appropriate to his or her career and educational goals. The curriculum thus ensures breadth through the core courses and the choice of a technical elective; technical core area coursework provides additional depth.

#### Student Outcomes

Electrical and computer engineering graduates should demonstrate:

- An ability to apply knowledge of mathematics, science, and engineering
- An ability to design and conduct experiments, as well as analyze and interpret data
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- · An ability to function on multidisciplinary teams
- · An ability to identify, formulate, and solve engineering problems
- · An understanding of professional and ethical responsibility
- · An ability to communicate effectively
- The broad education necessary to understand what impact engineering solutions have in global, economic, environmental, and societal contexts
- A recognition of the need for and an ability to engage in lifelong learning
- A knowledge of contemporary issues
- An ability to use techniques, skills, and modern engineering tools necessary for engineering practice

### **Program Educational Objectives**

Electrical and computer engineering graduates should:

- Contribute to the economic development of Texas and beyond through the ethical practice of electrical and computer engineering in industry and public service
- Exhibit leadership in technical or business activity through engineering ability, communication skills, and knowledge of contemporary and global issues
- Continue to educate themselves through professional study and personal research
- Be prepared for admission to, and to excel in, the best graduate programs in the world
- Design systems to collect, encode, store, transmit, and process energy and information, and to evaluate system performance, either individually or in teams
- Use their engineering ability and creative potential to create technology that will improve the quality of life in society

#### **Portable Computing Devices**

Students enrolled in a degree program in electrical and computer engineering will be expected to own a portable computing device capable of compiling and running a program suitable for use in the classroom and on the University wireless network. Use of these devices in the classroom and as a general part of the learning experience within our programs is at the discretion of faculty and not all classes or courses of instruction will require the use of these devices. Once admitted, students will be informed by the Electrical and Computer Engineering Department (ECE) office about specific device requirements.

#### Curriculum

Course requirements include courses within the Cockrell School of Engineering and other required courses. In addition, each student must complete the University's core curriculum. In some cases, a course that fulfills one of the following requirements may also be counted toward the core curriculum; these courses are identified below.

In the process of fulfilling engineering degree requirements, students must also complete coursework to satisfy the following flag requirements: one independent inquiry flag, one course with a quantitative reasoning flag, one ethics flag, one global cultures flag, one cultural diversity in the US flag, and two writing flags. The independent inquiry flag, the quantitative reasoning flag, the ethics flag, and two writing flags are carried by courses specifically required for the degree; these courses are identified below. Courses that may be used to fulfill flag requirements (p. 23) are identified in the *Course Schedule* (http:// registrar.utexas.edu/schedules). More information about flags is given in Skills and Experiences Flags (p. 23).

Enrollment in Electrical Engineering 333T, 160, 260, 360, 460, and 379K requires completion of Electrical Engineering 312 or 313 with a grade of at least *C*-.

Pre-approved courses are used to fulfill technical core, advanced math and/or science and core technical electives; other elective courses must be approved by the electrical and computer engineering faculty before the student enrolls in them.

Transfer Coursework: No more than 25 semester credit hours of transfer electrical engineering coursework may be counted for credit toward the electrical engineering degree.

Requirements		Hours
Electrical Engineering Co	ourses	
E E 302	Introduction to Electrical Engineering (part II science and technology)	3
E E 306	Introduction to Computing	3
E E 411	Circuit Theory	4
E E 312	Software Design and Implementation I	3
or E E 312H	Software Design and Implementatio	n I
E E 313	Linear Systems and Signals	3
E E 319K	Introduction to Embedded Systems	3
E E 333T	Engineering Communication (writing flag)	3
E E 351K	Probability and Random Processes	3
E E 364D	Introduction to Engineering Design (writing flag)	3
or E E 364E	Interdisciplinary Entrepreneurship	
One of the following senior design project courses:		
E E 464G	Multidisciplinary Senior Design Project (independent inquiry flag)	
E E 464H	Honors Senior Design Project (independent inquiry flag)	
E E 464K	Senior Design Project (independent inquiry flag)	
E E 464R	Research Senior Design Project (independent inquiry flag)	
E E 464S	Start-Up Senior Design Project	

two core courses (six	omponent: Within an identified "core": c-seven hours), one core laboratory one advanced mathematics course	14
	component electives: Within the same courses (minimum 12 hours)	12
	elective: Within any core of Electrical er-division electrical engineering course ur hours) <sup>1</sup>	3
Set of free electives: coursework taken for	at least 14 hours of additional a letter grade. <sup>2</sup>	14
Other Technical Cour	ses	
Mathematics		
M 408C & M 408D	Differential and Integral Calculus and Sequences, Series, and Multivariable Calculus (mathematics; quantitative reasoning flag)	8
or		
M 408K & M 408L & M 408M	Differential Calculus and Integral Calculus and Multivariable Calculus	
M 427J	Differential Equations with Linear Algebra (quantitative reasoning flag)	4
or M 427K	Advanced Calculus for Applications I	
M 340L	Matrices and Matrix Calculations	3
Physics		
PHY 103M	Laboratory for Physics 303K	1
PHY 103N	Laboratory for Physics 303L	1
РНҮ 303К	Engineering Physics I (part I science and technology; quantitative reasoning flag)	3
PHY 303L	Engineering Physics II (part I science and technology; quantitative reasoning flag)	3
Rhetoric and Writing		
RHE 306	Rhetoric and Writing (English composition)	3
Remaining Core Curr	iculum Courses	
E 316L	British Literature <sup>3</sup>	3
or E 316M	American Literature	
or E 316N	World Literature	
or E 316P	Masterworks of Literature	
American and Texas	government <sup>4</sup>	6
American history <sup>4</sup>		6
Visual and performin		3
Social and behavioral science <sup>5</sup>		3
UGS 302 or UGS 303	First-Year Signature Course <sup>6</sup> First-Year Signature Course	3

1. E E Option: Advanced Technical Component (mathematics) is four hours and one Advanced Technical Component Requirement is three hours. C E Option: Advanced Technical Component (mathematics) is three hours and one Advanced Technical Component Elective is four hours. 2. Must include at least one advanced mathematics or basic science course (three hours); no more than three hours of lower-division coursework; all coursework must count for a major in the offering department; all coursework must be taken in residence, except that up to three credit hours can be transferred with approval; no course can duplicate a course the student has taken or is required to take as part of the other Electrical Engineering coursework requirements.

3. Some sections of the English humanities courses (E 316L, 316M, 316N, 316P) carry a global cultures or cultural diversity flag.

4. Some sections carry a cultural diversity flag.

5. Some sections carry a global cultures and/or cultural diversity flag.

6. In UGS 302, all sections carry a writing flag; in UGS 303, some sections carry a writing flag.

Total Hours

125

#### Integrated BSEE/MSE program

The integrated degree program results in simultaneously awarding a Bachelor of Science in Electrical Engineering: Integrated Option (BSEE) degree, and a Master's of Science in Engineering (MSE) degree in any one of the ten graduate tracks offered by the graduate program in electrical and computer engineering (ECE).

There are two stages to admission, an informal non-binding department based stage and a second stage in which the student formally applies to the Graduate School within the integrated BSEE/MSE program and within one of the available ECE graduate tracks. At stage one, undergraduate students in the ECE department may apply to the integrated degree program after qualifying for admission to major sequence. The purpose of stage one is primarily to provide appropriate advising to students interested in and appropriate for the integrated program. Admission to the integrated program at stage one is based on the applicant's grade point average, letters of recommendation, a statement of purpose, and other relevant examples of academic ability and leadership. Students will be advised by the integrated program adviser about the appropriate courses to take and reserve for graduate credit in their senior year in order to complete the integrated program as efficiently as possible. As for admission to the regular standalone MSE program, all admissions decisions at stage two are made by the admissions committee in the respective graduate track, with admission requirements set by the graduate track, with the exception that Graduate Record Exam (GRE) test scores are not required of integrated program participants. While optimal, application and admission at stage one are not required for application and admission to the integrated program at stage two.

The integrated program requires 120 semester credit hours (SCH) for the BSEE portion of the integrated program, as opposed to the 125 SCH minimum required for the BSEE degree alone. Students in the integrated program begin taking graduate courses as seniors. Students admitted to the integrated program will normally take and reserve for graduate credit two graduate courses in place of approved electives from the advanced technical coursework that would *otherwise* be required in the regular/ standalone BSEE program. However, precisely which BSEE electives are to be replaced by the graduate courses can be adjusted as approved by technical core faculty advisers.

Students in this program will receive the BSEE and MSE degrees simultaneously after successfully completing a minimum total of 150 semester credit hours, 30 of which must qualify for the MSE program of work in electrical and computer engineering. Students unable to successfully complete the integrated program may obtain a BSEE degree by satisfying all of the requirements for the standalone BSEE degree. Since the regular BSEE degree requirements are a subset of the Integrated BSEE/MSE Program degree requirements, an undergraduate student should still be on a trajectory to graduate with the regular BSEE degree in the same timeframe that the student was on when applying to the Integrated BSEE/MSE Program. A student dismissed from the integrated program while a graduate student should already meet the degree requirements for the regular BSEE degree.

Information regarding the integrated program requirements and policies may be obtained from the ECE advising offices.

## Upper-Division Technical Component Areas

Both electrical engineering and computer engineering students must choose an advanced technical component area. Electrical engineering students must choose their advanced technical component area from the electrical engineering technical areas listed below; computer engineering students must choose their technical component area from the computer engineering technical areas.

For all technical component areas, the student must complete all courses in the area on the letter-grade basis.

#### Electrical Engineering Advanced Technical Component Areas Communications, Signal Processing, Networks, and Systems

Communications, signal processing, networks, and systems broadly encompasses the principles underlying the design and implementation of systems for information transmission. The field considers how information is represented, compressed, and transmitted on wired and wireless links and how communication networks can be, and are, designed and operated. A student who chooses this technical component area should recognize that communications and networking is a broad application domain where many engineering tools come into play: from circuit design for wireless phones to embedded network processors to system and application software for networked systems.

Students complete the following:

- 1. Either Electrical Engineering 325, *Electromagnetic Engineering* or E E 351M Digital Signal Processing
- 2. One of the following: Electrical Engineering 362K, *Introduction to Automatic Control*, E E 371R Digital Image and Video Processing, or E E 360K Introduction to Digital Communications
- 3. Core laboratory course: Either Electrical Engineering 445S, *Real-Time Digital Signal Processing Laboratory*, or E E 471C Wireless Communications Laboratory
- 4. Core mathematics course: Mathematics 427L, Advanced Calculus for Applications II
- 5. Four courses from the following list: Electrical Engineering 325, Electromagnetic Engineering Electrical Engineering 325K, Antennas and Wireless Propagation Electrical Engineering 445S, Real-Time Digital Signal Processing Laboratory Electrical Engineering 351M, Digital Signal Processing Electrical Engineering 360C, Algorithms Electrical Engineering 460J, Data Science Laboratory Electrical Engineering 360K, Introduction to Digital Communications Electrical Engineering 461P, Data Science Principles Electrical Engineering 362K, Introduction to Automatic Control Electrical Engineering 363M, Microwave and Radio Frequency Engineering Electrical Engineering 471C, Wireless Communications Laboratory Electrical Engineering 371R, Digital Image and Video Processing M 325K Discrete Mathematics

M 362M Introduction to Stochastic Processes (carries a quantitative reasoning flag) M 365C Real Analysis I

#### **Electronics and Integrated Circuits**

The electronics and integrated circuits technical component area involves the design and analysis of the circuits that provide the functionality of a system. The types of circuits that students encounter include analog and digital integrated circuits, radio frequency circuits, mixed signal (combination of analog and digital) circuits, power electronics, and biomedical electronics. The design and implementation of integrated circuits and systems using analog and digital building blocks are included in this core area. A student should choose this technical component area if he or she is interested in designing chips for applications, such as computing, telecommunications, and signal processing.

Students complete the following:

- 1. Electrical Engineering 325, Electromagnetic Engineering
- 2. Electrical Engineering 339, Solid-State Electronic Devices
- 3. Core laboratory course: Electrical Engineering 438, Fundamentals of Electronic Circuits I Laboratory
- 4. Core mathematics course: Mathematics 427L, Advanced Calculus for Applications II
- 5. Electrical Engineering 316, Digital Logic Design
- 6. Three courses from the following list:

Electrical Engineering 321K, *Mixed Signal and Circuits Laboratory* Electrical Engineering 438K, *Analog Electronics* Electrical Engineering 338L, *Analog Integrated Circuit Design* Electrical Engineering 440, *Integrated Circuit Nanomanufacturing Techniques* 

Electrical Engineering 445L, *Embedded Systems Design Laboratory* Electrical Engineering 445S, *Real-Time Digital Signal Processing Laboratory* 

Electrical Engineering 460M, *Digital Systems Design Using HDL* Electrical Engineering 460N, *Computer Architecture* 

Electrical Engineering 460R, Introduction to VLSI Design

Electrical Engineering 360S, *Digital Integrated Circuit Design* Electrical Engineering 361R, *Radio-Frequency Electronics* 

Electrical Engineering 363M, *Microwave and Radio Frequency* Engineering

Electrical Engineering 374K, *Biomedical Electronic Instrument Design* Electrical Engineering 374L, *Applications of Biomedical Engineering* 

#### Energy Systems and Renewable Energy

This technical component area provides the foundation for a career in electric power systems, generation, grid operation, motors and drives, and renewable energy sources. This area involves the study and design of reliable and economic electric power systems, including both traditional and renewable resources. Energy conversion involves conversion to and from electrical energy, including the study and design of electrical machines.

Students complete the following:

- 1. Electrical Engineering 325, Electromagnetic Engineering
- 2. Electrical Engineering 368L, *Power Systems Apparatus and Laboratory* or Electrical Engineering 369, *Power Systems Engineering*
- 3. Core laboratory course: Electrical Engineering 462L, *Power Electronics Laboratory*
- 4. Core mathematics course: Mathematics 427L, Advanced Calculus for Applications II
- 5. Electrical Engineering 362K, Introduction to Automatic Control

6. Three courses from the following list: Electrical Engineering 339, *Solid-State Electronic Devices* Electrical Engineering 339S, *Solar Energy Conversion Devices* Electrical Engineering 341, *Electric Drives and Machines* Electrical Engineering 362Q, *Power Quality and Harmonics* Electrical Engineering 362R, *Renewable Energy and Power Systems* Electrical Engineering 362S, *Development of a Solar-Powered Vehicle* Electrical Engineering 368L, *Power Systems Apparatus and Laboratory* Electrical Engineering 369, *Power Systems Engineering* Mechanical Engineering 337C, *Introduction to Nuclear Power Systems* 

#### Fields, Waves, and Electromagnetic Systems

Students in this technical component area study different aspects of applied electromagnetics, including antennas, radio wave propagation, microwave and radio frequency circuits and transmission structures, optical components and lasers, and engineering acoustics. A student should choose the electromagnetic engineering area if he or she is interested in engineering that involves the physical layer in modern communication and radar systems. Graduates are well positioned for jobs in antenna design and testing, propagation channel characterization, microwave and radio frequency circuit design, electromagnetic emission testing from electronic devices and systems, radar system design and development, optical telecommunication, optical information and signal processing systems, and component design and development.

Students complete the following:

- 1. Electrical Engineering 325, Electromagnetic Engineering
- 2. Electrical Engineering 339, Solid-State Electronic Devices
- 3. Core laboratory course: Electrical Engineering 438, *Fundamentals of Electronic Circuits I Laboratory* or Electrical Engineering 462L, *Power Electronics Laboratory*
- 4. Core mathematics course: Mathematics 427L, Advanced Calculus for Applications II
- 5. Either Electrical Engineering 325K, Antennas and Wireless Propagation or Electrical Engineering 363M, Microwave and Radio Frequency Engineering
- 6. Three courses from the following list:

Electrical Engineering 321K, *Mixed Signal and Circuits Laboratory* Electrical Engineering 325K, *Antennas and Wireless Propagation* Electrical Engineering 334K, *Quantum Theory of Engineering Electronic Materials* 

Electrical Engineering 341, *Electric Drives and Machines* Electrical Engineering 347, *Modern Optics* Electrical Engineering 348, *Laser and Optical Engineering* Electrical Engineering 361R, *Radio-Frequency Electronics* Electrical Engineering 363M, *Microwave and Radio Frequency Engineering* 

Electrical Engineering 363N, *Engineering Acoustics* Electrical Engineering 369, *Power Systems Engineering* Electrical Engineering 374K, *Biomedical Electronic Instrument Design* Electrical Engineering 374L, *Applications of Biomedical Engineering* 

#### Nanoelectronics and Nanotechnology

Students in this technical component area learn about the materials and devices used in modern electronic and optoelectronic systems. Through required and electives courses, students learn about the fundamentals of charge transport and interactions with light in semiconductors. They learn about devices beginning with diodes and transistors, the building blocks of integrated circuits, and extending to photodiodes, semiconductor lasers, photodetectors and photovoltaic devices. They learn about microelectronics fabrication techniques. And they are introduced to quantum mechanics, particularly as it applies to electronic and optoelectronic materials and devices. Students may also explore

device applications through digital and analog circuit design. With exposure to the topics in this area, students are well positioned to work in a wide variety of fields that rely on semiconductor devices, such as computers, telecommunications, the automotive industry, and consumer electronics.

Students complete the following:

- 1. Electrical Engineering 325, Electromagnetic Engineering
- 2. Electrical Engineering 339, Solid-State Electronic Devices
- 3. Core laboratory course: Electrical Engineering 440, Integrated Circuit Nanomanufacturing Techniques
- 4. Core mathematics course: Mathematics 427L, Advanced Calculus for Applications II
- 5. Four courses from the following list:
  - Electrical Engineering 334K, *Quantum Theory of Engineering Electronic Materials*

Electrical Engineering 438, Fundamentals of Electronic Circuits I Laboratory

Electrical Engineering 338L, Analog Integrated Circuit Design Electrical Engineering 339S, Solar Energy Conversion Devices Electrical Engineering 347, Modern Optics

Electrical Engineering 348, *Laser and Optical Engineering* Electrical Engineering 360S, *Digital Integrated Circuit Design* Electrical Engineering 438, *Fundamentals of Electronic Circuits I Laboratory* 

Electrical Engineering 460R, Introduction to VLSI Design

## Computer Engineering Advanced Technical Component Areas

#### Computer Architecture and Embedded Systems

Computer architecture involves understanding the operation and design of computers on many different levels. These levels include the instruction set, microarchitecture, and logic design. Embedded systems represent the combination of software and hardware that are designed to perform specific functions. These systems may be standalone items or an integral part of a larger system. Within this technical component area, students are exposed to logic design, programming, computer architecture, systems design, and digital signal processing. The student studying computer architecture will be well positioned to join the microprocessor design industry as a logic designer or a circuit designer. After a good deal of experience on the job, the student would be well positioned to become the chief architect of a new design.

Jobs in embedded systems involve defining, designing, and fabricating application-specific processors and computers in areas such as automotive electronics, consumer devices, and telecommunications.

Students complete the following:

- 1. Electrical Engineering 316, Digital Logic Design
- 2. Electrical Engineering 460N, Computer Architecture
- 3. Core laboratory course: Electrical Engineering 445L, *Embedded Systems Design Laboratory*
- 4. Core mathematics course: Mathematics 325K, Discrete Mathematics
- 5. Electrical Engineering 360C, Algorithms
- 6. Three courses from the following list:

Electrical Engineering 422C, *Software Design and Implementation II* Electrical Engineering 445M, *Embedded and Real-Time Systems Laboratory* 

Electrical Engineering 445S, Real-Time Digital Signal Processing Laboratory

Electrical Engineering 460M, *Digital Systems Design Using HDL* Electrical Engineering 360P, *Concurrent and Distributed Systems*  Electrical Engineering 460R, *Introduction to VLSI Design* Electrical Engineering 362K, *Introduction to Automatic Control* Computer Science 375, *Compilers* 

#### Software Engineering and Design

Courses in this area cover the engineering life cycle of software systems, including requirement analysis and specification, design, construction/ programming, testing, deployment, maintenance, and evolution. Area courses are intended to teach students theory, practical methods, and tools for designing, building, delivering, maintaining, and evolving software to meet stakeholder requirements. Every software engineer must understand how software systems operate and how they can be used to solve engineering problems and deliver solutions. The courses in this area are designed to educate students about a diverse and relevant set of technologies and about the ways that technology can be used to design and build software systems.

Students complete the following:

- 1. Electrical Engineering 422C, Software Design and Implementation II
- 2. Electrical Engineering 360C, Algorithms
- 3. Core laboratory course: Electrical Engineering 461L, *Software* Engineering and Design Laboratory
- 4. Core mathematics course: Mathematics 325K, Discrete Mathematics
- 5. Four courses from the following list: Electrical Engineering 316, Digital Logic Design Electrical Engineering 445L, Embedded Systems Design Laboratory Electrical Engineering 445M, Embedded and Real-Time Systems Laboratory Electrical Engineering 360F, Introduction to Software Engineering Electrical Engineering 460N, Computer Architecture Electrical Engineering 360P, Concurrent and Distributed Systems

Electrical Engineering 3600, *Concurrent and Distributed System* Electrical Engineering 361Q, *Requirements Engineering* Electrical Engineering 372N, *Telecommunication Networks* Electrical Engineering 360T, *Software Testing* Electrical Engineering 461P, *Data Science Principles* 

#### Data Science and Information Processing

This technical component trains students in information and signal processing, data mining as well as decision and control algorithms. Applications include data analytics, machine learning, sound and image processing as well as knowledge extraction and actuation.

Students complete the following:

- 1. Electrical Engineering 461P, Data Science Principles
- 2. Electrical Engineering 360C, Algorithms
- 3. Core laboratory course: Electrical Engineering 460J, *Data Science Laboratory*
- 4. Core mathematics course: Mathematics 325K, Discrete Mathematics
- 5. Electrical Engineering 351M, *Digital Signal Processing*
- 6. Three courses from the following list: Electrical Engineering 422C, *Software Design and Implementation II* Electrical Engineering 445S, *Real-Time Digital Signal Processing Laboratory*

Electrical Engineering 360P, *Concurrent and Distributed Systems* Electrical Engineering 361C, *Multicore Computing* Electrical Engineering 461L, *Software Engineering and Design* 

Laboratory Electrical Engineering 362K, Introduction to Automatic Control Electrical Engineering 471C, Wireless Communications Laboratory Electrical Engineering 371R, Digital Image and Video Processing Electrical Engineering 379K (Topic: Architecture for Big Data Science)

#### **Alternate Mathematics Courses**

For students who choose an advanced technical component area in computer engineering:

Mathematics 427L, Advanced Calculus for Applications II Mathematics 328K, Introduction to Number Theory Mathematics 343K, Introduction to Algebraic Structures Mathematics 344K, Intermediate Symbolic Logic Mathematics 348, Scientific Computation in Numerical Analysis (carries a quantitative reasoning flag) Mathematics 358K, Applied Statistics (carries a quantitative reasoning flag) Mathematics 374M, Mathematical Modeling in Science and Engineering

Computer Science 341, *Automata Theory* Computer Science 346, *Cryptography* 

For students who choose an advanced technical component area in electrical engineering:

Mathematics 325K, Discrete Mathematics Mathematics 328K, Introduction to Number Theory Mathematics 346, Applied Linear Algebra Mathematics 348, Scientific Computation in Numerical Analysis (carries a quantitative reasoning flag) Mathematics 358K, Applied Statistics (carries a quantitative reasoning flag) Mathematics 361, Theory of Functions of a Complex Variable Mathematics 362M, Introduction to Stochastic Processes Mathematics 372K, Partial Differential Equations and Applications Mathematics 374, Fourier and Laplace Transforms Mathematics 374M, Mathematical Modeling in Science and Engineering

## Suggested arrangement of courses: Computer and Electrical Engineering

Computer and Electrical Engineering Curriculum - Advanced Technical Component

First Year		
First Term	Hours Second Term	Hours
E E 302	3 E E 319K	3
E E 306	3 M 408D	4
M 408C	4 PHY 303K	3
RHE 306	3 PHY 103M	1
UGS 302 or 303	3 Visual and performing arts or socia and behavioral sciences	al 3
	16	14
Second Year		
First Term	Hours Second Term	Hours
E E 411	4 E 316L, 316M, 316N, or 316P	3
M 427J or 427K	4 E E 312	3
PHY 303L	3 E E 313	3
PHY 103N	1 GOV 310L	3
Visual and performing arts or social and behavioral sciences	3 M 340L	3
	15	15
Third Year		
First Term	Hours Second Term	Hours
E E 333T	3 Advanced technical elective	3
E E 351K	3 Free elective (mathematics or basis science)	c 4
Advanced technical component (mathematics)*	4 Free elective (satisfying constraint	s) 4

Advanced technical component laboratory	4 Advanced technical component requirement*	3
Advanced technical component requirement	3 Advanced technical component elective	3
	17	17
Fourth Year		
First Term	Hours Second Term	Hours
E E 364D	3 E E 464C, 464G, 464H, 464K, or 464R	4
American history	3 GOV 312L	3
Free elective (satisfying constraints)	3 American history	3
Advanced technical component electives	6 Advanced technical component elective	3
	Free elective (satisfying constraints)	3
	15	16

Total credit hours: 125

\*E E Option: Advanced Technical Component (mathematics) is four hours and one Advanced Technical Component elective is three hours.

\*C E Option: Advanced Technical Component (mathematics) is three hours and one Advanced Technical Component elective is four hours.

## Bachelor of Science in Environmental Engineering

Environmental Engineers protect the natural environment and the health of people as influenced by the environment. The field began as a part of civil engineering by providing the water supply for municipalities but has grown to encompass a broad view of the interaction of humans with the environment. The environmental engineer applies principles from all of the natural sciences (physics, chemistry, geology, and biology) to understand the natural environment and to build systems that protect that environment. Areas of environmental engineering include air quality, water quality, water resources, and contaminant process engineering.

The environmental engineering student obtains a broad background in mathematics and all the sciences, along with their application to the several areas of environmental engineering. This flexible curriculum allows the student to elect 18 semester hours of approved technical coursework to emphasize the areas of environmental engineering of most interest to the student. In addition, courses in the humanities and social sciences are included.

To excel as an environmental engineer, a student should have an aptitude for mathematics and science, an abiding interest in protecting the natural environment and public health, and the motivation to study and prepare for environmental engineering practice. Environmental engineering graduates of the University may seek a wide variety of employment opportunities with private consulting firms, industry, and government agencies at the local, state, and national levels. Those who plan to pursue graduate work in engineering, or in other professions such as business, medicine, law, or journalism, have an excellent base on which to build.

### **Student Outcomes**

Graduates of the environmental engineering program should attain the following outcomes:

- An ability to apply knowledge of mathematics, science, and engineering
- An ability to design and conduct experiments, as well as to analyze
   and interpret data
- An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental,

social, political, ethical, health and safety, manufacturability, and sustainability

- · An ability to function on multidisciplinary teams
- An ability to identify, formulate, and solve engineering problems
- · An understanding of professional and ethical responsibility
- · An ability to communicate effectively
- The broad education necessary to understand what impact engineering solutions have in global, economic, environmental, and societal contexts
- Recognition of the need for and an ability to engage in lifelong learning
- · Knowledge of contemporary issues
- An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

### **Program Educational Objectives**

Graduates of the environmental engineering program should address environmental engineering problems within a greater societal context. They should:

- Exhibit character and decision-making skills embodying professionalism and ethical behavior
- Apply knowledge, strong reasoning, and quantitative skills to design and implement creative and sustainable solutions
- Engage in lifelong learning to meet evolving engineering challenges facing society
- Exhibit strong communication, critical thinking, interpersonal, and management skills as leaders and contributors in the environmental engineering profession

### **Portable Computing Devices**

Students entering Environmental Engineering are required to have a laptop at their disposal. Laptops do not need to be brought to campus on a daily basis, but individual courses may require that a laptop be brought to class or lab sessions. For a list of minimum system requirements, see the Cockrell School of Engineering website (http:// www.caee.utexas.edu/component/content/article/43-students/it/480-uglaptop).

## Curriculum

Each student must complete the University's core curriculum (http:// catalog.utexas.edu/undergraduate/undergraduate-studies/academicpolicies-and-procedures). In some cases, a course required for the Bachelor of Science in Environmental Engineering may also be counted toward the core curriculum; these courses are identified below. To ensure that courses used to fulfill the social and behavioral sciences and visual and performing arts requirements of the core curriculum also meet ABET criteria, students should follow the guidance given in ABET Criteria.

In the process of fulfilling engineering degree requirements, students must also complete coursework to satisfy the following flag requirements: one independent inquiry flag, one quantitative reasoning flag, one ethics flag, one global cultures flag, one cultural diversity in the US flag, and two writing flags. The independent inquiry flag, the quantitative reasoning flag, the ethics flag, and one writing flag are carried by courses specifically required for the degree; these courses are identified below. Students are advised to fulfill the flag requirements with a course that meets other requirements of the degree. Courses that may be used to fulfill flag requirements (http:// catalog.utexas.edu/undergraduate/undergraduate-studies/academic-

policies-and-procedures) are identified in the Course Schedule (http://registrar.utexas.edu/schedules).

Math, science and engineering electives are chosen from a list of approved courses maintained in the undergraduate office.

Requirements		Hours
Environmental Engineeri	ng	
EVE 302	Foundations of Environmental Engineering	3
EVE 310	Sustainable Systems Engineering	3
EVE 312	Environmental Engineering and Science	3
Approved environmental	engineering elective	15
Approved environmental	engineering design elective	3
Architectural Engineering	3	
ARE 323K	Project Management and Economics	3
Biology		
BIO 311C	Introductory Biology I	3
Chemistry		
CH 301	Principles of Chemistry I (part I science and technology)	3
CH 302	Principles of Chemistry II (part I science and technology)	3
CH 204	Introduction to Chemical Practice	2
CH 328M	Organic Chemistry I	3
Civil Engineering		
C E 311K	Introduction to Computer Methods	3
C E 311S	Probability and Statistics for Civil Engineers	3
C E 319F	Elementary Mechanics of Fluids	3
C E 333T	Engineering Communication (writing flag; ethics flag)	3
C E 356	Elements of Hydraulic Engineering	3
Engineering Mechanics		
E M 306	Statics	3
Geology		
GEO 303	Introduction to Geology	3
Mathematics		
M 408C	Differential and Integral Calculus (mathematics; quantitative reasoning flag)	4
M 408D	Sequences, Series, and Multivariable Calculus	4
M 427J	Differential Equations with Linear Algebra (quantitative reasoning flag)	4
or M 427K	Advanced Calculus for Applications	I
Physics		
PHY 103M	Laboratory for Physics 303K	1
PHY 103N	Laboratory for Physics 303L	1
РНҮ 303К	Engineering Physics I (part II science and technology)	3
PHY 303L	Engineering Physics II	3
Other Required Courses		
M E 310T or M E 326	Applied Thermodynamics Thermodynamics	3

or CH 353	Physical Chemistry I	
Approved mathematics of	r science elective	3
Approved engineering ele	ective	6
Remaining Core Curriculu	um Courses	
RHE 306	Rhetoric and Writing	3
E 316L	British Literature <sup>1</sup>	3
or E 316M	American Literature	
or E 316N	World Literature	
or E 316P	Masterworks of Literature	
American and Texas Gov	ernment <sup>2</sup>	6
American History <sup>2</sup>		6
Social and behavioral sci	ence <sup>3</sup>	3
Visual and performing ar	ts <sup>3</sup>	3
UGS 302	First-Year Signature Course <sup>4</sup>	3
or UGS 303	First-Year Signature Course	
	English humanities courses (E 316L, a global cultures or cultural diversity	

flag.

2. Some sections carry a cultural diversity flag.

3. Some sections carry a global cultures and/or cultural diversity flag.

4. In UGS 302 all sections carry a writing flag; in UGS 303 some sections carry a writing flag.

Total Hours

## **Technical Electives**

Technical electives in environmental engineering are listed in four areas of specialization below. Six semester credit hours must be selected from one of the technical areas along with an approved environmental engineering design elective. Approved environmental engineering design electives are chosen from a list of approved courses maintained in the undergraduate office. The remaining environmental engineering electives can be taken from any area or combination of areas. Courses not listed can be approved by the undergraduate adviser.

## Area 1, Climate and Energy

Architectural Engineering 346N, Building Environmental Systems

Architectural Engineering 346P, HVAC Design

Architectural Engineering 370, Design of Energy Efficient and Healthy **Buildings** 

Architectural Engineering 371, Energy Simulation in Building Design

Architectural Engineering 372, Modeling of Air and Pollutant Flows in Buildings

Architectural Engineering 377K, Studies in Architectural Engineering

Chemical Engineering 379 (Topic: Atmospheric Physicochemical Processes)

Civil Engineering 369L, Air Pollution Engineering

Civil Engineering 369R, Indoor Air Quality

## Area 2, Sustainable Water Systems

Civil Engineering 342, Water and Wastewater Treatment Engineering

Civil Engineering 346, Solid Waste Engineering and Management

**Environmental Engineering 350** 

### Area 3, Water Resources and the Environment

Civil Engineering 374K, Hydrology

Civil Engineering 374L, Groundwater Hydraulics

Civil Engineering 357, Geotechnical Engineering

Civil Engineering 358, Introductory Ocean Engineering

### Area 4, Contaminant Fate and Transport

Chemical Engineering 319, Transport Phenomena

Civil Engineering 342, Water and Wastewater Treatment Engineering

Chemical Engineering 322, Thermodynamics

124

## Suggested Arrangement of Courses

First Year		
First Term	Hours Second Term	Hours
BIO 311C	3 CH 302	3
CH 301	3 CH 204	2
M 408C	4 M 408D	4
RHE 306	3 PHY 303K	3
UGS 302 or 303	3 PHY 103M	1
	EVE 302	3
	16	16
Second Year		
First Term	Hours Second Term	Hours
E M 306	3 CH 328M	3
M 427J or 427K	4 C E 311K	3
PHY 303L	3 C E 319F	3
PHY 103N	1 C E 333T	3
EVE 310	3 EVE 312	3
American and Texas government	3	
	17	15
Third Year		
First Term	Hours Second Term	Hours
M E 320, 326, or CH 353	3 GEO 303	3
C E 311S	3 Environmental Engineering elective	3
C E 356	3 Environmental Engineering elective	3
Environmental Engineering elective	3 American history	3
American government	3 E 316L, 316M, 316N, or 316P	3
	15	15
Fourth Year		
First Term	Hours Second Term	Hours
ARE 323K	3 Environmental Engineering design elective	3
Environmental Engineering elective	3 Engineering elective	3
Environmental Engineering elective	3 Engineering elective	3
Social and behavioral science	3 American history	3
Mathematics or science elective	3 Visual and performing arts	3
	15	15

Total credit hours: 124

## Bachelor of Science in Geosystems Engineering and Hydrogeology

Geosystems engineers and hydrogeologists are concerned with the development and use of engineering approaches in the management of natural resources from the earth's surface and subsurface, environmental restoration of subsurface sites, and other processes related to the earth sciences. This degree program, offered jointly by the Cockrell School of Engineering and the Jackson School of Geosciences, is designed to teach students the geological and engineering principles needed to solve subsurface resource development and environmental problems. The curriculum includes a fundamental sequence of engineering and geological sciences courses in such areas as multiphase fluid flow, physical hydrology, heat and mass transfer, field methods, and engineering design. This interdisciplinary systems approach, combining engineering and geological sciences, is increasingly required to address complex real-world problems such as characterization and remediation of aquifers. The degree program is designed to prepare graduates for employment with environmental, water resource management, and energy companies in addition to many government agencies. Better-qualified graduates of the program may pursue graduate study in subsurface environmental engineering, petroleum engineering, geology, and other related fields.

The objective of the degree program is to prepare graduates for successful careers in the fields of subsurface environmental engineering (including carbon dioxide sequestration), oil and gas production and services, or similar pursuits. Graduates are expected to understand the fundamental principles of science and engineering behind the technology of geosystems engineering and hydrogeology to keep their education from becoming outdated and to give them the capability of self-instruction after graduation. They should also be prepared to serve society by applying the ideals of ethical behavior, professionalism, and environmentally responsible stewardship of natural resources.

Containing the following elements, the technical curriculum provides both breadth and depth in a range of topics.

- A combination of college-level mathematics and basic sciences (some with experimental work) that includes mathematics through differential equations, physics, chemistry, and geology
- Basic engineering and geologic topics that develop a working knowledge of fluid mechanics, strength of materials, transport phenomena, material properties, phase behavior, and thermodynamics
- Engineering and geosciences topics that develop competence in characterization and evaluation of subsurface geological formations and their resources using geoscientific and engineering methods, including field methods; design and analysis of systems for producing, injecting, and handling fluids; application of hydrogeologic and reservoir engineering principles and practices for water and energy resource development and management; contamination evaluation and remediation methods for hydrologic resources; and use of project economics and resource valuation methods for design and decision making under conditions of risk and uncertainty
- A major capstone design experience that prepares students for engineering and hydrogeologic practice, based on the knowledge and skills acquired in earlier coursework and incorporating engineering and geological standards and realistic constraints

### **Portable Computing Devices**

Students entering Geosystems Engineering and Hydrogeology are required to have access to a portable computing device capable of running programs suitable for use in the classroom and on the university wireless network. The use of this device will be necessary in many required courses, and individual instructors may require the device be brought to class or lab sessions. For a list of minimum system requirements see http://www.pge.utexas.edu/future/undergraduate/ program.

## Curriculum

Course requirements include courses within the Cockrell School of Engineering and other required courses. In addition, each student must complete the University's Core Curriculum (p. 22). In some cases, a course that fulfills one of the following requirements may also be counted toward core curriculum or flag requirements; these courses are identified below.

In the process of fulfilling engineering degree requirements, students must also complete coursework to satisfy the following flag requirements: one independent inquiry flag, one course with a quantitative reasoning flag, one ethics flag, one global cultures flag, one cultural diversity in the US flag, and two writing flags. The independent inquiry flag, the quantitative reasoning flag, the ethics flag, and both writing flags are carried by courses specifically required for the degree; these courses are identified below. Courses that may be used to fulfill flag requirements (p. 23) are identified in the *Course Schedule* (http:// registrar.utexas.edu/schedules).

Courses used to fulfill technical and nontechnical elective requirements must be approved by the petroleum and geosystems engineering faculty and the geological sciences faculty before the student registers for them.

Requirements		Hours	
Petroleum and Geosyste	m Engineering Courses		
PGE 310	Formulation and Solution of		3
	Geosystems Engineering Problems		
PGE 322K	Transport Phenomena in Geosystems		3
PGE 323K	Reservoir Engineering I: Primary Recovery		3
PGE 323L	Reservoir Engineering II: Secondary and Tertiary Recovery		3
PGE 326	Thermodynamics and Phase Behavior		3
PGE 333T	Engineering Communication (writing flag and ethics flag)		3
PGE 358	Principles of Formation Evaluation		3
PGE 365	Resource Economics and Valuation		3
PGE 373L	Geosystems Engineering Design and Analysis (independent inquiry flag)		3
PGE 424	Petrophysics		4
PGE 427	Properties of Petroleum Fluids (Properties of Petroleum Fluids)		4
Chemistry			
CH 301	Principles of Chemistry I (part II science and technology)		3
CH 302	Principles of Chemistry II		3
Civil Engineering			
C E 357	Geotechnical Engineering		3

Engineering Machanica		
Engineering Mechanics E M 306	Statics	2
E M 319	Mechanics of Solids	3 3
Geological Sciences	Mechanics of Solids	3
GEO 303	Introduction to Coology	3
GEO 376L	Introduction to Geology Field Methods in Groundwater	3
GEO 376L	Hydrology	3
GEO 376S	Physical Hydrology	3
GEO 416K	Earth Materials	4
GEO 416M	Sedimentary Rocks	4
GEO 420K	Introduction to Field and Stratigraphic Methods	4
GEO 428	Structural Geology	4
GEO 476K	Groundwater Hydrology (writing flag)	4
Mathematics		
M 408C	Differential and Integral Calculus (mathematics; quantitative reasoning flag)	4
M 408D	Sequences, Series, and Multivariable Calculus	4
M 427J	Differential Equations with Linear Algebra (quantitative reasoning flag)	4
or M 427K	Advanced Calculus for Applications I	
Physics		
PHY 103M	Laboratory for Physics 303K	1
PHY 103N	Laboratory for Physics 303L	1
РНҮ 303К	Engineering Physics I (part I science and technology; quantitative reasoning flag)	3
PHY 303L	Engineering Physics II (part I science and technology; quantitative reasoning flag)	3
Other Required Courses		
Approved engineering ele	ective	3
Approved geosciences te	echnical elective	3
Rhetoric and Writing		
RHE 306	Rhetoric and Writing (English composition)	3
Remaining Core Curricul		
E 316L	British Literature <sup>1</sup>	3
or E 316M	American Literature	
or E 316N	World Literature	
or E 316P	Masterworks of Literature	
American government <sup>2</sup>		6
American history <sup>2</sup>		6
Visual and performing ar		3
Social and behavioral sci		3
UGS 302	First-Year Signature Course <sup>4</sup>	3
or UGS 303	First-Year Signature Course	
1. Some sections of the I	English humanities courses (E 316L,	

1. Some sections of the English humanities courses (E 316L, 316M, 316N, 316P) carry a global cultures or cultural diversity flag.

2. Some sections carry a cultural diversity flag.

3. Some sections carry a global cultures and/or cultural diversity flag.

4. In UGS 302, all sections carry a writing flag. In UGS 303, some sections carry a writing flag.

132

Total Hours

## Suggested Arrangement of Courses

First Year			
First Term	Hours Second Term	Hours	
CH 301	3 CH 302	3	
GEO 303	3 M 408D	4	
M 408C	4 PHY 303K	3	
RHE 306	3 PHY 103M	1	
UGS 302 or 303	3 PGE 333T	3	
	American history	3	
	16	17	
Second Year			
First Term	Hours Second Term	Hours	
GEO 416K	4 E M 319	3	
GEO 416M	4 PGE 310	3	
E M 306	3 PGE 427	4	
M 427J or 427K	4 PGE 326	3	
	PHY 303L	3	
	PHY 103N	1	
	15	17	
Third Year			
First Term	Hours Second Term	Hours Summer Term	Hours
GEO 476K	4 C E 357	3 GEO 376L	3
PGE 322K	3 GEO 420K	4	
PGE 323K	3 PGE 323L	3	
PGE 424	4 American	3	
	government		
Social and behavioral	government 3 PGE 358	3	
Social and behavioral sciences	3 PGE 358		
sciences	5	3	3
sciences Fourth Year	3 PGE 358	16	3
sciences Fourth Year First Term	3 PGE 358 17 Hours Second Term	16 Hours	3
sciences Fourth Year	3 PGE 358	16	3
sciences Fourth Year First Term E 316L, 316M, 316N,	3 PGE 358 17 Hours Second Term	16 Hours	3
sciences Fourth Year First Term E 316L, 316M, 316N, or 316P	3 PGE 358 17 Hours Second Term 3 PGE 373L 4 Geoscience technical	16 Hours 3	3
sciences Fourth Year First Term E 316L, 316M, 316N, or 316P GEO 428	3 PGE 358 17 Hours Second Term 3 PGE 373L 4 Geoscience technical elective 3 American	16 Hours 3 3	3
sciences Fourth Year First Term E 316L, 316M, 316N, or 316P GEO 428 GEO 376S PGE 365	3 PGE 358 17 Hours Second Term 3 PGE 373L 4 Geoscience technical elective 3 American government	16 Hours 3 3 3	3
sciences Fourth Year First Term E 316L, 316M, 316N, or 316P GEO 428 GEO 376S	3 PGE 358 17 Hours Second Term 3 PGE 373L 4 Geoscience technical elective 3 American government 3 American history	16 Hours 3 3 3 3 3	3

Total credit hours: 132

# Bachelor of Science in Mechanical Engineering

Mechanical engineering is one of the largest and broadest fields of technical study. Mechanical engineers are concerned with the engineering systems used to control and transform energy to meet the needs of humanity. In mechanical engineering, students develop an understanding of basic topics and fundamental principles upon which engineered systems are conceived and developed in a modern society. It is an excellent foundation for a rewarding career in engineering, as well as for further study in business, law, medicine, and other professions that require a solid foundation in science and technology, and the ability to solve problems.

The mechanical engineering department is dedicated to graduating mechanical engineers who practice mechanical engineering in the general stems of thermal/fluid systems, mechanical systems and design, and materials and manufacturing in industry and government settings; pursue advanced education, research and development, and other creative efforts in science and technology; conduct themselves in a responsible, professional, and ethical manner; and participate as leaders in activities that support service to and economic development of the region, state, and nation.

The mechanical engineering faculty has defined 10 educational outcomes that students in the program are expected to achieve by the time of graduation. These outcomes are

- Knowledge of and ability to apply engineering and science fundamentals to real problems
- · Ability to formulate and solve open-ended problems
- · Ability to design mechanical components, systems, and processes
- Ability to set up, conduct, and interpret experiments, and to present the results in a professional manner
- · Ability to use modern computer tools in mechanical engineering
- · Ability to communicate in written, oral, and graphical forms
- Ability to work in teams and apply interpersonal skills in engineering contexts
- Ability and desire to lay a foundation for continued learning beyond the baccalaureate degree
- Awareness of professional issues in engineering practice, including ethical responsibility, safety, the creative enterprise, and loyalty and commitment to the profession
- Awareness of contemporary issues in engineering practice, including economic, social, political, and environmental issues and global impact

The mechanical engineering curriculum meets these outcomes by providing breadth and depth across a range of topics.

- A combination of college-level mathematics and basic science courses (some with experimental work) that includes mathematics, probability and statistics, physics, and chemistry
- Engineering courses that develop a working knowledge of graphics and computer-aided design, engineering mechanics, thermodynamics, kinematics, dynamics and control of mechanical systems, computational methods, fluid mechanics, heat transfer, materials science and engineering, mechatronics, technical communication, and engineering economics
- Mechanical engineering project and laboratory experiences that develop competence in measurements and instrumentation, interpretation of data, reverse engineering analysis of mechanical systems, use of computational tools for engineering analysis, integration of multidisciplinary topics in design of complex systems, teamwork and project planning, and written and oral communication
- A sequence of engineering design courses, culminating in a major capstone design experience in collaboration with an industrial sponsor, that draws on the knowledge and skills students have acquired in earlier coursework and incorporates modern engineering standards and realistic constraints
- Core curriculum courses, including social and behavioral sciences, humanities, and visual and performing arts electives, that complement the technical content of the curriculum

 A broad range of senior elective options that provide a career gateway to further study and lifelong learning in the practice of engineering and other professions

### **PROCEED (Project-Centered Education)**

The undergraduate curriculum in mechanical engineering is built on the principle of project-centered education, or PROCEED. A number of courses throughout the curriculum are structured to motivate the study of engineering science by challenging students with in-depth analysis of real mechanical components and systems. In PROCEED, students address real-world projects based on current industrial methods and practices. Undergraduate laboratories and computer facilities are integrated into the curriculum to connect theory with practice.

### **Portable Computing Devices**

Students entering Mechanical Engineering are expected to have a laptop computer at their disposal. The use of laptop computers will be necessary in many required courses, and individual instructors may require that a laptop be brought to class or lab sessions. For a list of minimum system requirements see: http://www.me.utexas.edu/laptopreq.

## Curriculum

Course requirements include courses within the Cockrell School of Engineering, and other required courses. In addition, each student must complete the University's core curriculum (p. 23). In some cases, a course required as part of the major may also be counted toward the core curriculum; these courses are identified below.

In the process of fulfilling engineering degree requirements, students must also complete coursework to satisfy the University's flag requirements: one independent inquiry flag, one course with a quantitative reasoning flag, one ethics flag, one global cultures flag, one cultural diversity in the United States flag, and three writing flags. The independent inquiry flag, the quantitative reasoning flag, the ethics flag, and three writing flags are carried by courses specifically required for the degree; these courses are identified below. Courses that may be used to fulfill flag requirements (p. 23) are identified in the *Course Schedule* (https://registrar.utexas.edu/schedules).

Requirements		Hours	
Mechanical Engineering	Courses		
M E 130L	Experimental Fluid Mechanics		1
M E 134L	Materials Engineering Laboratory		1
M E 139L	Experimental Heat Transfer		1
M E 140L	Mechatronics Laboratory		1
M E 144L	Dynamic Systems and Controls Laboratory		1
M E 266K	Mechanical Engineering Design Project (independent inquiry flag and writing flag)		2
M E 266P	Design Project Laboratory		2
M E 302	Introduction to Engineering Design and Graphics		3
M E 314D	Dynamics (Dynamics)		3
M E 316T	Thermodynamics (Thermodynamics)		3
M E 318M	Programming and Engineering Computational Methods		3
M E 330	Fluid Mechanics		3

M E 333T	Engineering Communication (writing flag and ethics flag)	3
M E 334	Materials Engineering	3
M E 335	Engineering Statistics	3
M E 338	Machine Elements	3
M E 339	Heat Transfer	3
M E 340	Mechatronics	3
M E 344	Dynamic Systems and Controls	3
M E 353	Engineering Finance	3
M E 366J	Mechanical Engineering Design Methodology (writing flag)	3
Chemistry		
CH 301	Principles of Chemistry I (part II science and technology)	3
<b>Engineering Mechanics</b>		
E M 306	Statics	3
E M 319	Mechanics of Solids	3
Mathematics		
M 408C	Differential and Integral Calculus (mathematics; quantitative reasoning flag)	4
M 408D	Sequences, Series, and Multivariable Calculus	4
M 427J	Differential Equations with Linear Algebra	4
or M 427K	Advanced Calculus for Applications I	
M 427L	Advanced Calculus for Applications II	4
Physics		
РНҮ 303К	Engineering Physics I (part I science and technology; quantitative reasoning flag)	3
PHY 303L	Engineering Physics II (part I science and technology; quantitative reasoning flag)	3
PHY 103M	Laboratory for Physics 303K	1
PHY 103N	Laboratory for Physics 303L	1
Rhetoric and Writing		
RHE 306	Rhetoric and Writing (English composition)	3
Other Required Courses		
Approved career gatewa	ay electives	12
Approved natural science	ce/mathematics elective	3
Remaining Core Curricu	lum Requirements	
E 316L	British Literature	3
or E 316M	American Literature	
or E 316N	World Literature	
or E 316P	Masterworks of Literature	
American and Texas go	vernment <sup>2</sup>	6
American history <sup>2</sup>	2	6
Social and behavioral so		3
Visual and performing a		3
UGS 302	First-Year Signature Course <sup>4</sup>	3
or UGS 303	First-Year Signature Course	

1. Some sections of the English humanities courses (E 316L, 316M, 316N, 316P) carry a global cultures or cultural diversity flag.
2. Some sections carry a cultural diversity flag.
3. Some sections carry a global cultures and/or cultural diversity flag.
4. In UGS 302, all sections carry a writing flag. In UGS 303, some sections carry a writing flag.
Total Hours

### **Career Gateway Elective Options**

The ME curriculum includes 12 hours of Career Gateway Electives which give students the flexibility to tailor their upper-division academic program to meet a variety of career goals, while ensuring that they graduate with a more robust grounding in a selected technical area than is provided in the core curriculum alone. Detailed guidelines for choosing CGEs and for approval of CGE choices are published on the mechanical engineering website (http://www.me.utexas.edu) and may be subject to periodic change as needs arise. Exceptions can be considered on a caseby-case basis by petition to the undergraduate adviser.

126

## Bridges to the Future Credential Program

The Department of Mechanical Engineering offers highly qualified senior-level undergraduate students an opportunity for in-depth study and research in an emerging area of mechanical engineering through the Bridges to the Future Credential Program. Upon completion of a prescribed series of technical electives and an independent research study under the direction of a faculty member and a doctoral student mentor, students receive a signed award and a letter from the department chair that describes the program and the work completed. This credential and its supporting documentation, plus supporting letters from supervising faculty and mentors, can be valuable assets for students applying to graduate school or pursuing competitive job opportunities. This program will not appear on the student's transcript.

Students must apply for admission to a credential program during the junior year. In some cases, the coursework may include a graduate course, which may be credited toward a University graduate degree.

Details on course offerings and admission procedures are available from the Department of Mechanical Engineering undergraduate office and on the mechanical engineering website (http://www.me.utexas.edu).

# Minors and Transcript-Recognized Certificate Programs

Minors and transcript-recognized certificate programs offer interdisciplinary curricula that support and extend a student's major. Minors that may be of particular interest to mechanical engineering students include the minor in Materials Science and Engineering and certificates in Computational Science and Engineering, the National Academy of Engineering Grand Challenges Scholars Program, Humanitarian Engineering, Applied Statistical Modeling, and Pre-Health Professions. Additional information about minors and transcript recognized certificates is available online (p. 13).

## Integrated BSME/MSE Program

The integrated degree program results in simultaneously awarding a Bachelor of Science in Mechanical Engineering (BSME) and a Master of Science in Engineering (MSE) degree offered by the Department of Mechanical Engineering. The objective of the Integrated BSME/ MSE Program is to enable prepared undergraduates in Mechanical Engineering to earn two degrees in a shortened time period. By applying AP and Credit by Exam courses, having students take recommended summer courses, and allowing seniors to enroll in graduate-level engineering courses reserved for graduate credit, the program enables graduates to complete both degree requirements in five years.

Admissions. Current undergraduate mechanical engineering (ME) students may begin the application process to the Integrated BSME/ MSE Program option in the first term of their third year. Admission includes the two steps outlined below. Undergraduate students not in the mechanical engineering major are not eligible to apply. It is expected that all students selected for the program in Step 1 and have been successful in their first graduate-level coursework will be selected for admission in Step 2. Successful completion will be evaluated and determined by the department's Domestic Graduate Admission Committee and the graduate adviser.

Step 1. Students complete the first step in application for admission to the Integrated BSME/MSE Program in the first term of the third year. The Step 1 application is internal through the department and includes a resume, statement of purpose, and letters of recommendation. Qualified applicants will be selected based on the applicant's progress to degree completion, grade point average, and other qualifications included in the application materials. Selected students will be notified early in the second term of the third year of their admission status for the integrated program, allowing them to meet with an academic adviser to plan graduate coursework in the first term of their fourth year.

Step 2. Students complete the second step in the application in the second term of their fourth year. The Step 2 application is formal through the Graduate and International Admission Center (GIAC). Admission to the integrated program will be based on a review of the applicant's undergraduate record and GPA, GRE scores, performance in graduate coursework, letters of recommendation, personal statement, TOEFL score (if required), and research experience.

If a student in their fourth year is taking graduate courses and would be on track to complete the integrated program but did not apply in their third year through Step 1, they may apply by completing Step 1 and Step 2 together. These students will be evaluated for admission on the same criteria.

**Degree Requirements.** In order for integrated program students to complete both the BSME and MSE degrees in five years, the department waives six semester credit hours (SCH) of technical area electives in lieu of six SCH of graduate engineering coursework reserved for graduate credit taken in the fourth year. This reduces the total BSME degree requirements for integrated program students from 126 to 120 SCH.

Students in the integrated program complete 12 SCH of graduate coursework in their fourth year and 18-24 SCH of graduate coursework in their fifth year to complete a total of 30-36 SCH of graduate coursework for the MSE degree as described in the Graduate Catalog. Students have the option of choosing the coursework, report, or thesis option for the MSE degree as described in the Graduate Catalog. The selected degree option determines the number of hours required to graduate with the MSE degree. Courses the student takes will be determined with the graduate adviser and academic adviser to ensure compliance with degree requirements and to meet the students' career goals.

Students unable to successfully complete the integrated program, or who wish to terminate pursuit of the MSE for any reason, may obtain a BSME degree by applying for a change of major back to the standalone BSME program and satisfying all of the requirements for the standalone degree. Six SCH of the graduate courses taken in the fourth year may count toward the 12 SCH of CGEs required to complete the entire 126 SCH requirements. An undergraduate student leaving the integrated program will be on a trajectory to graduate with the regular BSME degree in the same timeframe prior to admission to the integrated program.

Graduates of the integrated program will receive the BSME and MSE degrees simultaneously after successfully completing the 120 SCH for the BSME and 30-36 SCH for the MSE, a total of 150-156 SCH. Ideally students in this program will graduate with both degrees in a total of five years to completion.

Advising. Once admitted, students will be advised each semester by the graduate adviser and an academic adviser to complete coursework required for the BSME degree in their fourth year, and completion of the coursework required for the MSE degree in their fourth and fifth years. Information regarding the integrated program requirements and policies may be obtained from the ME Academic Advising Office in ETC 5.224.

# Suggested Arrangement of Courses

Hours Second Term	Hours
3 M 408D	4
4 PHY 303K	3
3 PHY 103M	1
3 Social and behavioral sciences	3
3 Visual and performing arts	3
American history	3
16	17
Hours Second Term	Hours
3 E M 319	3
4 M 427L	4
3 M E 318M	3
3 M E 314D (Dynamics)	3
1 M E 333T	3
3	
17	16
Hours Second Term	Hours
3 M E 338	3
1 M E 339	3
3 M E 139L	1
1 M E 340	3
3 M E 140L	1
3 Approved career gateway elective	3
14	14
Hours Second Term	Hours
3 M E 266K	2
	2
1 M E 200P	2
3 Approved career gateway elective	3
3 Approved career gateway elective 3 Approved mathematics/natural	3
3 Approved career gateway elective 3 Approved mathematics/natural science elective	3 3
	3 M 408D 4 PHY 303K 3 PHY 103M 3 Social and behavioral sciences 3 Visual and performing arts American history 16 Hours Second Term 3 E M 319 4 M 427L 3 M E 318M 3 M E 314D (Dynamics) 1 M E 333T 3 17 Hours Second Term 3 M E 338 1 M E 339 3 M E 139L 1 M E 340 3 M E 139L 1 M E 340 3 M E 140L 3 Approved career gateway elective 14 Hours Second Term

Total credit hours: 126

## Bachelor of Science in Petroleum Engineering

Energy is a key component to people's everyday lives. Petroleum engineers are able to address and solve important technology challenges that will lead to energy security and societal prosperity, so the position is in high demand. This challenging and rewarding field of engineering requires creative application of a wide spectrum of knowledge, including, but not limited to mathematics, physics, geology, and chemistry.

Worldwide energy demand is growing, and experts agree that oil and gas will continue to play an important role in the world's energy supply. The decision making for complex projects falls to a great extent upon petroleum engineers, providing them with a high degree of responsibility. In addition, since hydrocarbon reserves are found in such diverse areas as Asia, South America, and Europe, petroleum engineers will have opportunities for exciting assignments all over the globe.

Petroleum engineers play a variety of roles within the energy business. They design and monitor the drilling of exploratory and development wells used to locate and produce the oil and gas from the subsurface. They work with technologies that can describe the characteristics of rocks deep beneath the surface and detect the type of fluids contained in those rocks. They install and maintain the equipment that lifts fluids from subsurface reservoirs to the surface, and they design surface collection and treatment facilities to prepare produced hydrocarbons for delivery to a refinery or pipeline. Hydraulic fracturing of shale gas and tight oil is the responsibility of a petroleum engineer, as is the development and implementation of enhanced oil recovery methods that capture stranded or bypassed hydrocarbons from old oilfields. In addition to these traditional petroleum engineering career choices, there are other emerging careers for petroleum engineering graduates in pollution clean up, underground waste disposal (including the subsurface injection of carbon dioxide to reduce atmospheric greenhouse gases), and hydrology.

The objective of the petroleum engineering program is to graduate practical, qualified engineers who can successfully pursue careers in the oil and gas production and services industries or similar areas. Graduates of the program are expected to understand the fundamental principles of science and engineering behind the technology of petroleum engineering to keep their education current and to give them the capability of self-instruction after graduation. They should be prepared to serve society by using the ideals of ethical behavior, professionalism, and environmentally responsible stewardship of natural resources.

The technical curriculum contains the following elements:

- A combination of college-level mathematics and basic sciences (some with experimental work) that includes mathematics through differential equations, probability and statistics, physics, chemistry, and geology
- Engineering topics that develop a working knowledge of fluid mechanics, strength of materials, transport phenomena, material properties, phase behavior, and thermodynamics
- Petroleum engineering topics that develop competence in (1) design and analysis of well systems and procedures for drilling and completing wells; (2) characterization and evaluation of subsurface geological formations and their resources using geoscientific and engineering methods; (3) design and analysis of systems for producing, injecting, and handling fluids; (4) application of reservoir engineering principles and practices to optimize resource development and management; and (5) use of project economics and resource valuation methods for design and decision making under conditions of risk and uncertainty
- A major capstone design experience that prepares students for engineering practice, based on the knowledge and skills acquired in earlier coursework and incorporating engineering standards and realistic constraints

### **Portable Computing Devices**

Students entering Petroleum Engineering are required to have access to a portable computing device capable of running programs suitable for use in the classroom and on the university wireless network. The use of this device will be necessary in many required courses, and individual instructors may require the device be brought to class or lab sessions. For a list of minimum system requirements see: http:// www.pge.utexas.edu/future/undergraduate/program.

### Curriculum

Course requirements include courses within the Cockrell School of Engineering and other required courses. In addition, each student must complete the University's Core Curriculum (p. 22). In some cases, a course that fulfills one of the following requirements may also be counted toward core curriculum or flag requirements; these courses are identified below.

In the process of fulfilling engineering degree requirements, students must also complete coursework to satisfy the following flag requirements: one independent inquiry flag, one course with a quantitative reasoning flag, one ethics flag, one global cultures flag, one cultural diversity in the US flag, and two writing flags. The independent inquiry flag, the quantitative reasoning flag, the ethics flag, and both writing flags are carried by courses specifically required for the degree; these courses are identified below. Courses that may be used to fulfill flag requirements (p. 23) are identified in the *Course Schedule* (http:// registrar.utexas.edu/schedules).

Courses used to fulfill technical and nontechnical elective requirements must be approved by the petroleum and geosystems engineering undergraduate adviser before the student enrolls in them.

Requirements	Hours		
Petroleum and Geosyste	ms Engineering Courses		
PGE 301	Engineering, Energy, and the Environment	3	
PGE 310	Formulation and Solution of Geosystems Engineering Problems	3	
PGE 427	Properties of Petroleum Fluids	4	
PGE 322K	Transport Phenomena in Geosystems	3	
PGE 326	Thermodynamics and Phase Behavior	3	
PGE 333T	Engineering Communication (writing flag and ethics flag)	3	
PGE 323K	Reservoir Engineering I: Primary Recovery	3	
PGE 323L	Reservoir Engineering II: Secondary and Tertiary Recovery	3	
PGE 334	Reservoir Geomechanics	3	
PGE 337	Introduction to Geostatistics	3	
PGE 358	Principles of Formation Evaluation	3	
PGE 362	Production Technology and Design	3	
PGE 365	Resource Economics and Valuation	3	
PGE 373L	Geosystems Engineering Design and Analysis	3	
PGE 424	Petrophysics	4	
PGE 430	Drilling and Well Completions	4	
Chemistry			
CH 301	Principles of Chemistry I (part II science and technology)	3	

CH 302	302 Principles of Chemistry II		
Engineering Mechanic	cs		
E M 306	Statics	3	
E M 319	Mechanics of Solids	3	
Geological Sciences			
GEO 303	Introduction to Geology	3	
GEO 316P	Sedimentary Rocks	3	
Mathematics			
M 408C	Differential and Integral Calculus (mathematics; quantitative reasoning flag)	4	
M 408D	Sequences, Series, and Multivariable Calculus	4	
M 427J	Differential Equations with Linear Algebra (quantitative reasoning flag)	4	
or M 427K	Advanced Calculus for Applications I		
Physics			
РНҮ 303К	Engineering Physics I (part I science and technology; quantitative reasoning flag)	3	
PHY 303L	Engineering Physics II (part I science and technology; quantitative reasoning flag)	3	
PHY 103M	Laboratory for Physics 303K	1	
PHY 103N	Laboratory for Physics 303L	1	
Rhetoric and Writing			
RHE 306	Rhetoric and Writing (English composition)	3	
<b>Other Required Cours</b>	es		
Approved technical ar	ea electives	12	
Remaining Core Curri	culum Courses		
E 316L	British Literature <sup>1</sup>	3	
or E 316M	American Literature		
or E 316N	World Literature		
or E 316P	Masterworks of Literature		
American and Texas	government <sup>2</sup>	6	
American history <sup>2</sup>		6	
Visual and performing	g arts <sup>3</sup>	3	
Social and behavioral sciences <sup>3</sup>			
UGS 302 or UGS 303	First-Year Signature Course <sup>4</sup> First-Year Signature Course	3	

1. Some sections of the English humanities courses (E 316L, 316M, 316N, 316P) carry a global cultures or cultural diversity flag.

2. Some sections carry a cultural diversity flag.

3. Some sections carry a global cultures and/or cultural diversity flag.

4. In UGS 302, all sections carry a writing flag. In UGS 303, some sections carry a writing flag.

Total Hours

Suggested Arrangement of Courses

First Year		
First Term	Hours Second Term	Hours
GEO 303	3 PHY 303K	3
CH 301	3 PHY 103M	1
M 408C	4 M 408D	4
RHE 306	3 PGE 301	3
UGS 302 or 303	3 CH 302	3
	Social and behavioral sciences or visual and performing arts	3
	16	17
Second Year		
First Term	Hours Second Term	Hours
PHY 303L	3 GEO 316P	3
PHY 103N	1 E M 319	3
E M 306	3 PGE 333T	3
M 427J or 427K	4 Social and behavioral sciences or visual or performing arts	3
PGE 310	3 PGE 427	4
PGE 326	3	
	17	16
Third Year		
First Term	Hours Second Term	Hours
PGE 323K	3 PGE 323L	3
PGE 424	4 PGE 358	3
PGE 430	4 PGE 362	3
PGE 322K	3 American history	3
American government	3 Approved technical area elective	3
	17	15
Fourth Year		
First Term	Hours Second Term	Hours
PGE 334	3 PGE 373L	3
PGE 337	3 E 316L, 316M, 316N, or 316P	3
PGE 365	3 American history	3
Approved technical area elective	3 Approved technical area electives	6
American government	3	
	15	15

Total credit hours: 128

## **Minor and Certificate Programs**

#### Minor

128

The transcript-recognized undergraduate academic minor must be completed in conjunction with an undergraduate degree at The University of Texas at Austin. For more information regarding the requirements for achieving a minor, including a comprehensive list of minors, please visit the Minors and Certificate Programs (http:// catalog.utexas.edu/undergraduate/the-university/minor-and-certificateprograms) section of the *Undergraduate Catalog*.

## **Materials Science and Engineering Minor**

The transcript-recognized undergraduate academic minor in materials science and engineering must be completed in conjunction with an undergraduate degree at The University of Texas at Austin in one of the following majors: chemistry, physics, electrical and computer engineering, or mechanical engineering; students pursuing an integrated undergraduate/graduate program must complete the requirements for the minor within one year after completing the undergraduate requirements of their program. For more information regarding the requirements for achieving a minor, including a comprehensive list of minors, please visit the Minors and Certificate Programs (p. 13) section

of the Undergraduate Catalog. Details about the minor in Materials Science and Engineering are available at http://tmi.utexas.edu/ academics/undergraduate-minor-materials-science-engineering/.

### Admissions

To be considered for admission into the Minor Program for Materials Science and Engineering, students must meet the following requirements:

- The minor must be completed in conjunction with an undergraduate degree in one of the four supported majors of chemistry, physics, electrical and computer engineering, or mechanical engineering.
- Students must have completed M 408C, M 408D, M 427J, CH 301, PHY 303K and PHY 303L, or equivalent and all with a grade of *C* or higher.
- Students who have completed 30 hours or more and have not taken more than 60 hours will be encouraged to apply online at the earliest possible date; deadlines will be March 1 for fall or summer and October 1 for spring.

Applications will be reviewed and rendered in time for fall and spring admissions.

### Requirements

The requirements for the minor in Materials Science and Engineering will consist of 15 credit hours towards the minor. All students will be required to take a three-credit hour, laboratory-based bridge course (E S 360). The remainder of the required courses required for the minor will consist of a sequence of courses that are specific to the major degree and which are detailed below.

If students are interested in additional coursework, they can see http:// tmi.utexas.edu/academics/undergraduate-minor-materials-scienceengineering/ for a complete list of courses that would serve as optional electives. Courses beyond 15 hours are not required for the completion of the minor.

### **Chemistry Majors**

Requirements		Hours	
E S 360M	Experiments in Materials Science and Engineering		3
CH 353	Physical Chemistry I		3
PHY 355	Modern Physics and Thermodynamics		3
CHE 355	Introduction to Polymers		3
M E 349	Corrosion Engineering		3
PHY 355 CHE 355	Physical Chemistry I Modern Physics and Thermodynamics Introduction to Polymers		3

All classes must be taken on the letter-grade basis. The student must earn a combined grade point average of at least 2.00 in these courses.

\*An additional 3 hours of optional electives may be taken. For a complete list of courses available, please see http:// tmi.utexas.edu/academics/undergraduate-minor-materialsscience-engineering/.

### **Physics Majors**

Requirements		Hours	
E S 360M	Experiments in Materials Science and Engineering		3
PHY 369	Thermodynamics and Statistical Mechanics		3
CH 367C	Materials Chemistry		3
or CH 367L	Macromolecular Chemistry		

or M E 336	Materials Processing	
CH 354S	Elements of Spectroscopy	3
E E 334K	Quantum Theory of Engineering	3
	Electronic Materials	

All classes must be taken on the letter-grade basis. The student must earn a combined grade point average of at least 2.00 in these courses.

\*An additional 3 hours of optional electives may be taken. For a complete list of courses available, please seehttp:// tmi.utexas.edu/academics/undergraduate-minor-materialsscience-engineering/.

### **Electrical Engineering Majors**

Requirements		Hours	
E S 360M	Experiments in Materials Science and Engineering		3
PHY 369	Thermodynamics and Statistical Mechanics		3
E E 325	Electromagnetic Engineering		3
CH 354S	Elements of Spectroscopy		3
or CH 367C	Materials Chemistry		
E E 334K	Quantum Theory of Engineering Electronic Materials		3

All classes must be taken on the letter-grade basis. The student must earn a combined grade point average of at least 2.00 in these courses.

\*An additional 3 hours of optional electives may be taken. For a complete list of courses available, please see http:// tmi.utexas.edu/academics/undergraduate-minor-materialsscience-engineering/.

#### **Mechanical Engineering Majors**

Requirements	Hours	
E S 360M	Experiments in Materials Science and Engineering	3
M E 316T	Thermodynamics	3
PHY 355	Modern Physics and Thermodynamics	3
or PHY 375S	Introductory Solid-State Physics	
or PHY 369	Thermodynamics and Statistical Mechanics	
M E 378K	Mechanical Behavior of Materials	3
M E 349	Corrosion Engineering	3
All classes must be take	n on the letter-grade basis. The	

All classes must be taken on the letter-grade basis. The student must earn a combined grade point average of at least 2.00 in these courses.

\*An additional 3 hours of optional electives may be taken. For a complete list of courses available, please see http:// tmi.utexas.edu/academics/undergraduate-minor-materialsscience-engineering/.

### **Certificate Programs**

### National Academy of Engineering Grand Challenges Scholars Program Certificate

The National Academy of Engineering Grand Challenges Scholars Program (GCSP) certificate is designed to be complementary, not additive, to a student's traditional academic path. The GCSP certificate provides students with the scholarship network and formal recognition from the National Academy of Engineering, while typically requiring only one course beyond their standard degree program.

The GCSP certificate program is designed to offer students from all majors and all years an introduction to the program through Engineering Studies 377, an array of university-wide course connections, and mentorship. GC Scholars choose between 18 and 24 hours of approved coursework from a broad range of offerings that align with the five key program components. The five key curriculum components include facing the 21st Century Engineering Grand Challenges with (1) entrepreneurship and (2) service-learning by (3) understanding global dimensions through (4) research and (5) interdisciplinary curriculum. Each Scholar must choose at least one class that emphasizes each one of the components. Scholars will be advised on progress regularly by faculty affiliated with the program, and will present their work at an annual GCSP colloquium.

The certificate requirements are:

Requirements		Hours	
E S 377	Topics in Engineering (Topic: Grand Challenges)		3
At least 18 hours of app Coursework Program Pl	roved courses from GC Scholar an		18
Be a student of good standing			
Complete courses, a research project, a community project, a comprehensive reflective report, and a final design, which are evaluated with aligned rubrics.			

## Computational Science and Engineering Certificate

The Cockrell School sponsors the transcript-recognized Certificate in Computational Science and Engineering along with the Jackson School of Geosciences, the College of Liberal Arts, and the College of Natural Sciences.

The foundations of science and engineering are under rapid, dramatic, and irreversible change brought on by the advent of the computer. Steady growth in computer capabilities, and enormous expansion in the scope and sophistication of computational modeling and simulation, have added computation as the third pillar of scientific discovery and have revolutionized engineering practice. Computational science and engineering can affect virtually every aspect of human existence, including the health, security, productivity, and competitiveness of nations.

The Computational Science and Engineering Certificate program is sponsored by the Cockrell School of Engineering, the Jackson School of Geosciences, the College of Liberal Arts, and the College of Natural Sciences; it is administered by the Institute for Computational Engineering and Sciences (ICES). The program offers highly qualified upper-division students an opportunity for in-depth study and research in computational science and engineering, including computational and applied mathematics, numerical simulation, scientific computation, and visualization. A student who completes the general requirements listed on Transcript-Recognized Programs (p. 13) and the specific requirements below receives recognition on his or her University transcript and a letter from the director of ICES that describes the program and the work completed. Along with supporting letters from supervising faculty and graduate mentors, these are valuable assets for students applying to graduate school and pursuing competitive job opportunities. To apply for admission, students must have completed 60 semester hours of coursework, must have a grade point average of at least 3.00, and must have taken coursework in calculus.

Students must complete 18 semester hours of approved coursework with a grade of at least *C*- in each course. A student's overall GPA in certificate courses must be 3.00 or greater.

Requirements	Hours	
Students must take at least one course in each of the following areas:		18
Upper Division Mathematics		
Basic Programming		
Numerical Applications		
Advanced Computing		
Electives		
Scientific Computing Project <sup>1</sup>		
following areas: Upper Division Mathematics Basic Programming Numerical Applications Advanced Computing Electives		18

1. To be supervised by a member of the computational science, engineering, and mathematics (CSEM) graduate program faculty. The research project is completed in a three-semester-hour research methods or individual instruction course, which the student should take during the senior year. The research project may include mentoring by ICES postdoctoral fellows and CSEM graduate students as part of a vertical instructional research team.

With the approval of the certificate program's faculty adviser, course substitutions may be made within the broad area of computational science and engineering.

Some courses on the approved course list may be restricted by the department offering the course. Please note that the CSE Certificate Program cannot ask the department to waive prerequisites or force the department to lift restrictions on their courses.

A list of approved courses is available at http://www.ices.utexas.edu/ programs/cse-certificate/ and in the Institute for Computational Engineering and Sciences, ACE 4.110

### Humanitarian Engineering Certificate

The undergraduate Humanitarian Engineering Certificate provides students with the opportunity to develop expertise in designing and/ or implementing projects or products for traditionally underserved populations, e.g., the physically or mentally challenged, low-income or rural communities. The participants will develop not only technical knowledge but also awareness of social, political, and/or economic circumstances that may be important to the development of engineering solutions for underserved populations.

The certificate consists of 18 hours. Students must receive a grade of at least a *C*- in each course applied toward the certificate and have a cumulative grade point average of at least 3.0 in the courses presented to fulfill the certificate. The certificate program will be managed by the Committee for the Humanitarian Engineering Certificate in the Department of Mechanical Engineering. Students may apply for participation in the program at any time during their enrollment at The University of Texas at Austin, but it is recommended that they apply prior to starting the requirements. Students must contact the Committee for the Humanitarian Engineering Certificate in the Department of Mechanical Engineering Certificate in the Department of Mechanical Engineering Certificate in the semester in which they are completing the requirements and graduating.

The course requirements for the certificate are:

Requirements		Hours		C E 377K	Studies in Civil Engineering	
Three hours from the	following:		3		(Topic: Designing Sustainable	
UGS 302	First-Year Signature Course <sup>1</sup>				Nanomaterials)	
UGS 303	First-Year Signature Course <sup>1</sup>			CHE 339	Introduction to Biochemical	
SOC 307N	Sociology of Development			CHE 339T	Engineering Cell and Tissue Engineering	
ANT 302	Cultural Anthropology			CHE 341	Design for Environment	
CTI 302	Classics of Social and Political			CHE 341	Chemical Engineering Economics	
GRG 305	Thought This Human World: An Introduction				and Business Analysis	
PHY 303L	to Geography Engineering Physics II		4	CHE 357	Technology and Its Impact on the Environment	
& PHY 103N	and Laboratory for Physics 303L		-	E E 339S	Solar Energy Conversion Devices	
Humanitarian engine	ering project chosen from the following:		4	E E 362R	Renewable Energy and Power	
E S 277K	Project Development with				Systems	
& E S 277L	Underserved Communities and Project Design with			E E 362S	Development of a Solar-Powered Vehicle	
Approved project of	Underserved Communities design course such as M E 466K <sup>2</sup>			E E 374K	Biomedical Electronic Instrument Design	
	dent study research project <sup>2</sup>			E E 374L	Applications of Biomedical	
M E 179M	Topics in Mechanical Engineering		1		Engineering	
	(Topic: Humanitarian Engineering			M E 337F	Nuclear Environmental Protection	
	Seminar)			M E 354M	Biomechanics of Human Movement	
Three hours from the	following:		3	M E 374S	Solar Energy Systems Design	
GRG 344K	Global Food, Farming, and Hunger			M E 363M	Energy Technology and Policy	
SOC 369K	Population and Society			M E 379M	Topics in Mechanical Engineering	
GRG 336	Contemporary Cultural Geography				(Topic: Design/Control of Robots	
GRG 350K	Geographies of Globalization				for Rehabilitation)	
GRG 357	Medical Geography			M E 374T	Renewable Energy Technology	
SOC 321G	Global Health Issues and Health Systems			M E 371D	Medical Device Design and Manufacturing	
CTI 323	Might and Right among Nations			M E 378E	Nanotechnology for Sustainable	
PHL 325C	Environmental Ethics				Energy	
PHL 325M	Medicine, Ethics, and Society			M E 379M	Topics in Mechanical Engineering (Topic: Development of a Solar-	
ANS 372	Topics in Asian Cultures (Topic 26:				Powered Vehicle)	
	Global Markets and Local Cultures)			PGE 305	Energy and the Environment	
HIS 366N	Topics in History (Topic 18: Global History of Disease)					
ADV 324	Communicating Sustainability				ist of courses, please see your adviser.	
CMS 340K	Communication and Social Change				e options must be obtained in advance for the Humanitarian Engineering	
Three hours from the			3	Certificate.		
ARE 323K	Project Management and				s may be substituted for those listed	
'	Economics				e adviser for Humanitarian Engineering.	
ARE 346N	Building Environmental Systems			_		
BME 339	Biochemical Engineering			Courses		
BME 342	Biomechanics of Human Movement	I				
BME 344	Biomechanics				oval to offer the following courses in the academic	
BME 352	Engineering Biomaterials				d 2019–2020; however, not all courses are taught mmer session. Students should consult the <i>Course</i>	
BME 358	Medical Decision Making				strar.utexas.edu/schedules) to determine which	
C E 341	Introduction to Environmental Engineering			courses and topics v	vill be offered during a particular semester or e <i>Course Schedule</i> (https://registrar.utexas.edu/	
C E 342	Water and Wastewater Treatment Engineering				reflect changes made to the course inventory after	
C E 364	Design of Wastewater and Water Treatment Facilities				course numbers is given in <i>General Information</i>	
C E 369R	Indoor Air Quality			(http://catalog.utexas.edu/general-information/academic-policies-a procedures/credit-value-and-course-numbers). In brief, the first digit		
C E 374K	Hydrology			of a course number indicates the semester hour value of the course		
					d digits indicate the rank of the course: if they are	

01 through 19, the course is of lower-division rank; if 20 through 79, of upper-division rank; if 80 through 99, of graduate rank.

## **Engineering Studies**

### **Engineering Studies: E S**

#### **Lower-Division Courses**

#### E S 301. Engineering Design and Problem Solving.

Intended for non-Cockrell School of Engineering students. Introduction to the scope of engineering, foundations of engineering science, and engineering design. Three lecture hours a week for one semester. Prerequisite: Consent of instructor.

#### E S 102. Spatial Visualization.

Restricted to engineering majors. Instruction in the learned ability to mentally manipulate two- and three-dimensional structures. The equivalent of one lecture hour a week for one semester. Engineering Studies 102 and General Engineering 119, 219, 319 (Topic: Spatial Visualization) may not both be counted. Offered on the letter-grade basis only.

#### E S 119, 219, 319. Topics in Engineering.

Restricted to engineering students. For each semester hour of credit earned, one lecture hour a week for one semester. Engineering Studies 119, 219, 319 and General Engineering 119, 219, 319 may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

#### **Upper-Division Courses**

#### E S 321G. GLUE Undergraduate Research.

Restricted to engineering majors. Research experience and seminar for undergraduate engineers. Seminar involves workshops, discussion, and oral reports. Semester long research project required. One and one-half lecture hours and six laboratory hours a week for one semester, with additional laboratory hours to be arranged. Only one of the following may be counted unless topics vary: Engineering Studies 122, 222, 322, 321G (or 322G), General Engineering 222. Offered on the letter-grade basis only. Prerequisite: Consent of instructor.

#### E S 122, 222, 322. Topics in Professional Development.

Restricted to engineering students. Small-group seminar involving reading, discussion, and oral reports. For each semester hour of credit earned, one lecture hour a week for one semester. Only one of the following may be counted unless topics vary: Engineering Studies 122, 222, 322, 321G (or 322G), General Engineering 222. May be repeated for credit when the topics vary. Offered on the pass/fail basis only.

Topic 1: EOE Career Development Seminar. Introduction to skills and professional practices in engineering. Engineering Studies 122, 222, 322 (Topic: EOE Career Development Seminar) and 122, 222, 322 (Topic 1) may not both be counted. Offered on the pass/fail basis only. Topic 2: EOE Leadership Development Seminar. Introduction to professional practices that focus on self-awareness and in-depth discussion of leadership styles and skill development. Engineering Studies 122, 222, 322 (Topic: EOE Leadership Development Seminar) and 122, 222, 322 (Topic 2) may not both be counted. Offered on the pass/fail basis only.

**Topic 3: WEP Leadership Seminar.** Practical applications to assess leadership and communication styles. Engineering Studies 122, 222, 322 (Topic: WEP Leadership Seminar) and 122, 222, 322 (Topic 3) may not both be counted. Offered on the pass/fail basis only.

#### E S 160, 260, 360. Service Learning for Engineers.

Supervised participation in a service-learning project that helps meet a community need. May be repeated for credit when the projects vary. With approval of the student's major department, may be counted toward an engineering degree. Prerequisite: Consent of instructor.

#### E S 360M. Experiments in Materials Science and Engineering.

Hands-on lab-based course designed to teach practical techniques in the synthesis and characterization of materials and their properties, and to use experiments to explore fundamental and potentially abstract materials concepts. Four-and-one-half laboratory hours a week for one semester. Engineering Studies 360M and 377 (Topic: Experiments in Materials Science and Engineering) may not both be counted. Prerequisite: Chemistry 301, Math 408C, 408D and 427J, and Physics 303K and 303L. For students in majors that offer an introductory materials science and engineering course, it is advised to take it prior to taking this course.

#### E S 370H. Engineering Entrepreneurship.

Principles of engineering entrepreneurship, including legal aspects and the ethics of practice. Three lecture hours a week for one semester. Engineering Studies 370H and General Engineering 370H may not both be counted. Prerequisite: Admission to an appropriate major sequence in engineering and to the Engineering Honors Program.

#### E S 370L. Nanofabrication and Nanomaterials.

Covers the basic tools and materials involved in the fabrication processes needed to create nano-scale structures and functional nanomaterials. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and consent of instructor.

#### E S 370M. Nanodevices.

Covers the basic theory behind nano-scale devices used in the electronics, display, and energy industries. Three lecture hours a week for one semester. Prerequisite: Upper-division standing, Engineering Studies 370L, and consent of instructor.

#### E S 370N. Nanotechnology Innovation.

Provides a framework for innovation with a specific focus on applications of nanotechnology. Three lecture hours a week for one semester. Prerequisite: Upper-division standing, Engineering Studies 370L and 370M, and consent of instructor.

#### E S 177, 277, 377. Topics in Engineering.

For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Longhorn Startup Seminar.** Overview of entrepreneurship using real-world examples. Only one of the following may be counted: Biomedical Engineering 177T, 277T, 377T (Topic: Longhorn Startup Seminar), Computer Science 178, 378 (Topic: Longhorn Startup Seminar), Engineering Studies 177, 277, 377 (Topic: Longhorn Startup Seminar), 177, 277, 377 (Topic 1), Fine Arts 160, 260, 360 (Topic: Longhorn Startup Seminar), 170, 270, 370.

#### E S 377E. Interdisciplinary Entrepreneurship: Elective.

Restricted to engineering students. Projects must differ significantly from those developed for Electrical Engineering 364D and 364E. Focus on skill development and mentoring in start-up formation, technology development, market validation, marketing, sales, operations, human resources, program management, and finance. Includes discussion of intellectual property, social issues in design, as well as ethical and safety considerations. Emphasis on written and oral presentation of start-up activities. The equivalent of three lecture hours a week for one semester. Only one of the following may be counted: Computer Science 374L, 378 (Topic: Longhorn Startup), Electrical Engineering 377E, Engineering Studies 377E, Management 337 (Topic: Interdisciplinary Entrepreneurship), 337 (Topic 2). Prerequisite: Consent of instructor.

## E S 277K. Project Development with Underserved Communities.

Restricted to engineering and social work majors. Focus on skills to initiate, evaluate, and plan an international engineering service project with an underserved community. Two lecture hours and two lab hours a week for one semester. Only one of the following may be counted: Engineering Studies 277K, Civil Engineering 277K (Topic: Project Development for Underserved Communities), Mechanical Engineering 279M (Topic: Project Development for Underserved Communities). Offered on the letter-grade basis only. Prerequisite: Consent of the instructor.

#### E S 277L. Project Design with Underserved Communities.

Restricted to students in the Projects for Underserved Communities program. Focuses on design of basic infrastructure systems in developing countries. Two lecture hours and two lab hours a week for one semester. Only one of the following may be counted: Engineering Studies 277L, Civil Engineering 277K (Topic: Project Design for Underserved Communities), Mechanical Engineering 279M (Topic: Project Design for Underserved Communities). Offered on the lettergrade basis only. Prerequisite: Consent of instructor.

## E S 177M. Project Implementation with Underserved Communities.

Restricted to students in the Projects for Underserved Communities program. Taught on location in international locations such as India, Tanzania, and Guatemala. Entails implementation of project, collecting information for future projects, and checking on previously completed PUC projects if applicable. The equivalent of one lecture hour a week for one semester. Only one of the following may be counted: Engineering Studies 177M, 177 (Topic: Proj Impl Undersrvd Comms-Gua), 177 (Topic: Proj Implm Undersrvd Comms-Ind), 177 (Topic: Proj Implm Undersrvd Comms-Tan), 177 (Topic: Proj Implm Undersrvd Comms-Tha), Mechanical Engineering 179M (Topic: Project Imp Underserved Commun), 179M (Topic: PUC Implementation-Intl). Offered on the lettergrade basis only.

#### E S 279K. Undergraduate Research Experience.

Restricted to undergraduate students in the Graduates Linking with Undergraduates in Engineering (GLUE) program. Directed study or research in a selected area of engineering. One lecture hour and three laboratory hours a week for one semester. Engineering Studies 279K and General Engineering 279K may not both be counted. May be repeated for credit. Offered on the pass/fail basis only. Prerequisite: A major in engineering and a University grade point average of at least 3.00.

#### E S 279L. Women in Engineering Leadership Seminar.

Restricted to engineering students. Lectures, discussions, and exercises related to various leadership issues. Two lecture hours a week for one semester. Engineering Studies 279L and General Engineering 279L may not both be counted. Offered on the pass/fail basis only.

#### E S 079M. Undergraduate Research Experience.

Restricted to undergraduate students in the Equal Opportunity in Engineering Program. One lecture hour a week for one semester. Prerequisite: A major in engineering and a University grade point average of at least 3.00.

## **General Engineering**

### General Engineering: G E

#### **Lower-Division Courses**

## G E 102E, 202E. Supplemental Instruction for Electrical Engineering 302.

Restricted to engineering majors. Development of problem-solving skills in the material covered in Electrical Engineering 302. For each semester hour of credit earned, two hours of supplemental instruction a week for one semester. May not be counted toward any engineering degree. Offered on the letter-grade basis only. Prerequisite: Concurrent enrollment in Electrical Engineering 302.

## G E 104J, 204J. Supplemental Instruction for Mathematics 427J.

Restricted to engineering majors. Development of problem-solving skills in the material covered in Mathematics 427J. For each semester hour of credit earned, two hours of supplemental instruction a week for one semester. May not be counted toward any engineering degree. Offered on the letter-grade basis only. Prerequisite: Concurrent enrollment in Mathematic 427J.

#### G E 105G. Supplemental Instruction for Mathematics 305G.

Restricted to engineering majors. Development of problem-solving skills in the material covered in Mathematics 305G. For each semester hour of credit earned, two hours of supplemental instruction a week for one semester. May not be counted toward any engineering degree. Offered on the letter-grade basis only. Prerequisite: Concurrent enrollment in Mathematic 305G.

#### G E 106D, 206D. Supplemental Instruction for Chemistry 301.

Restricted to engineering majors. Development of problem-solving skills in the material covered in Chemistry 301. For each semester hour of credit earned, two hours of supplemental instruction a week for one semester. May not be counted toward any engineering degree. Offered on the letter-grade basis only. Prerequisite: Concurrent enrollment in Chemistry 301.

#### G E 206E. Supplemental Instruction for Chemistry 302.

Restricted to engineering students. Development of problem-solving skills in the material covered in Chemistry 302. Two two-hour discussion sections a week for one semester. May not be counted toward any engineering degree. Prerequisite: Concurrent enrollment in Chemistry 302.

## G E 107C, 207C. Supplemental Instruction for Mathematics 408C.

Restricted to engineering majors. Development of problem-solving skills in the material covered in Mathematics 408C. For each semester hour of credit earned, two hours of supplemental instruction a week for one semester. May not be counted toward any engineering degree. Offered on the letter-grade basis only. Prerequisite: Concurrent enrollment in Mathematics 408C.

## G E 107D, 207D. Supplemental Instruction for Mathematics 408D.

Restricted to engineering majors. Development of problem-solving skills in the material covered in Mathematics 408D. For each semester hour of credit earned, two hours of supplemental instruction a week for one semester. May not be counted toward any engineering degree. Offered on the letter-grade basis only. Prerequisite: Concurrent enrollment in Mathematics 408D.

#### G E 207E. Supplemental Instruction for Mathematics 340L.

Restricted to engineering students. Development of problem-solving skills in the material covered in Mathematics 340L. Two two-hour discussion sections a week for one semester. May not be counted toward any engineering degree. Prerequisite: Concurrent enrollment in Mathematics 340L.

#### G E 207K. Supplemental Instruction for Mathematics 427K.

Restricted to engineering students. Development of problem-solving skills in the material covered in Mathematics 427K. Two two-hour discussion sections a week for one semester. May not be counted toward any engineering degree. Offered on the letter-grade basis only. Prerequisite: Concurrent enrollment in Mathematics 427K.

#### G E 207L. Supplemental Instruction for Mathematics 427L.

Restricted to engineering students. Development of problem-solving skills in the material covered in Mathematics 427L. Two two-hour discussion sections a week for one semester. May not be counted toward any engineering degree. Prerequisite: Concurrent enrollment in Mathematics 427L.

#### G E 207R. Supplemental Instruction for Mathematics 408K.

Restricted to engineering students. Four lecture hours a week for one semester. May not be counted toward any engineering degree. Prerequisite: Concurrent enrollment in Mathematics 408K.

#### G E 207S. Supplemental Instruction for Mathematics 408L.

Restricted to engineering students. Four lecture hours a week for one semester. May not be counted toward any engineering degree. Prerequisite: Concurrent enrollment in Mathematics 408L.

#### G E 207T. Supplemental Instruction for Mathematics 408M.

Restricted to engineering students. Four lecture hours a week for one semester. May not be counted toward any engineering degree. Prerequisite: Concurrent enrollment in Mathematics 408M.

#### G E 108K, 208K. Supplemental Instruction for Physics 303K.

Restricted to engineering majors. Development of problem-solving skills in the material covered in Physics 303K. For each semester hour of credit earned, two hours of supplemental instruction a week for one semester. May not be counted toward any engineering degree. Offered on the lettergrade basis only. Prerequisite: Concurrent enrollment in Physics 303K.

#### G E 108L, 208L. Supplemental Instruction for Physics 303L.

Restricted to engineering majors. Development of problem-solving skills in the material covered in Physics 303L. For each semester hour of credit earned, two hours of supplemental instruction a week for one semester. May not be counted toward any engineering degree. Offered on the lettergrade basis only. Prerequisite: Concurrent enrollment in Physics 303L.

#### G E 209. Supplemental Instruction for Engineering Courses.

Restricted to engineering students. Development of problem-solving skills in the material covered in selected engineering courses. Two twohour discussion sections a week for one semester. May not be counted toward any engineering degree. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: Varies with the topic.

## G E 109C, 209C. Supplemental Instruction for Engineering Mechanics 306.

Restricted to engineering majors. Development of problem-solving skills in the material covered in Engineering Mechanics 306. For each semester hour of credit earned, two hours of supplemental instruction a week for one semester. May not be counted toward any engineering degree. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: Concurrent enrollment in Engineering Mechanics 306 and consent of instructor.

## G E 109D, 209D. Supplemental Instruction for Engineering Mechanics 319.

Restricted to engineering majors. Development of problem-solving skills in the material covered in Engineering Mechanics 319. For each semester hour of credit earned, two hours of supplemental instruction a week for one semester. May not be counted toward any engineering degree. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: Concurrent enrollment in Engineering Mechanics 319 and consent of instructor.

## G E 212. Supplemental Instruction for Electrical Engineering 312.

Restricted to engineering students. Development of problem-solving skills in the material covered in Electrical Engineering 312. Two twohour discussion sections a week for one semester. May not be counted toward any engineering degree. Prerequisite: Concurrent enrollment in Electrical Engineering 312.

#### G E 119, 219, 319. Topics in Engineering.

Restricted to engineering students. Topics to supplement lower-division engineering curriculum. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. Engineering Studies 119, 219, 319 and General Engineering 119, 219, 319 may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

#### **Upper-Division Courses**

#### G E 222. Topics in Professional Development.

Restricted to engineering students. Small-group seminar involving reading, discussion, and oral reports. Two lecture hours a week for one semester. Only one of the following may be counted unless topics vary: Engineering Studies 122, 222, 322, 321G (or 322G), General Engineering 222. May be repeated for credit when the topics vary. Offered on the pass/fail basis only.

## Department of Aerospace Engineering and Engineering Mechanics

Students should note that all prerequisite courses for the following courses must be completed on the letter-grade basis with a grade of at least *C*-.

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

#### **Aerospace Engineering: ASE**

#### **Lower-Division Courses**

#### ASE 301. Introduction to Computer Programming.

Same as Computational Engineering 301. Basic computer programming concepts for engineering computations. Programming in MATLAB or similar computing environments is emphasized, but more advanced languages may also be discussed. Three lecture hours a week for one semester. Aerospace Engineering 301 and Computational Engineering 301 may not both be counted.

#### ASE 102. Introduction to Aerospace Engineering.

Restricted to first year students. Introduction to aerospace engineering, including problem solving and study skills. Examines opportunities and responsibilities of careers in aerospace engineering. One lecture hour a week for one semester. May not be counted toward any engineering degree. Offered on the pass/fail basis only.

#### ASE 118. Student Leadership Seminar.

Principles of human development, strategic learning, and teaching. Small-group seminar involving reading, discussion, and written reports. One lecture hour a week for one semester. Offered on the pass/fail basis only. Prerequisite: Consent of the engineering undergraduate adviser.

#### ASE 119K. Low-Speed Aerodynamics Laboratory.

Restricted to students in the aerospace engineering major sequence. Wind tunnel and water channel experiments at subsonic speeds; use of instrumentation and written reports. One lecture hour and three laboratory hours a week for one semester. Aerospace Engineering 119K and 120K may not both be counted.

#### ASE 119L. High-Speed Aerodynamics Laboratory.

Restricted to students in the aerospace engineering major sequence. Experiments using a variable-Mach number supersonic wind tunnel and ballistics range, and an investigation of aerodynamics of blunt bodies and simple airfoils in supersonic flow. One lecture hour and three laboratory hours a week for one semester. Aerospace Engineering 119L and 162M may not both be counted.

#### ASE 119M. Spacecraft Systems Laboratory.

Restricted to students in the aerospace engineering major sequence. Overview of spacecraft subsystems, mission design tools, numerical techniques, mission planning references, mission constraints, and mission design projects. Includes written reports. One lecture hour and one and one-half laboratory hours a week for one semester. Aerospace Engineering 119M and 166M may not both be counted.

#### ASE 119N. Flight Dynamics Laboratory.

Restricted to students in the aerospace engineering major sequence Introduction to flight testing; instrumentation and methodology; performance testing. Computer modeling and dynamic simulation of aircraft motion; aircraft sizing. Written reports. One lecture hour and three laboratory hours a week for one semester. Aerospace Engineering 119N and 167M may not be both counted.

#### ASE 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Aerospace Engineering.

Used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office or the school's International Engineering Education Programs. Credit is recorded as assigned by the study abroad adviser in the Department of Aerospace Engineering and Engineering Mechanics. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

#### **Upper-Division Courses**

#### ASE 320. Low-Speed Aerodynamics.

Fundamental concepts, fluid statics; integral and differential analysis; detailed analysis of inviscid, incompressible flows; aerodynamics of airfoils and wings. Three lecture hours a week for one semester. Prerequisite: Mathematics 427L, and Mechanical Engineering 310T or 320, with a grade of at least C- in each.

#### ASE 120K. Low-Speed Aerodynamics Laboratory.

Wind tunnel and water channel experiments at subsonic speeds; use of instrumentation and written reports. One lecture hour and three laboratory hours a week for one semester. Prerequisite: Credit with a grade of at least C- or registration for Aerospace Engineering 320; Aerospace Engineering 333T (or another approved engineering communication course) with a grade of at least C-; and Mathematics 427L with a grade of at least C-.

#### ASE 321K. Computational Methods for Structural Analysis.

Same as Computational Engineering 321K. Matrix structural analysis of systems that can be idealized as being comprised of axial bar elements, beam elements, and frame elements. Notion of element-by-element assembly of the governing system of algebraic equations. A systematic introduction to (and use of) the fundamental idea of a weak statement of a boundary value problem, particularly as concerns the numerical treatment/approximation of such problems. Interpretation of the weakstatement in terms of the principle of virtual work. Galerkin's method as applied to structural analysis. An introduction to the classical Galerkin finite element method with application to structures and plane elasticity. Energy principles and their utility in solving problems in solid mechanics, as well as their connection to the finite element method. Three lecture hours a week for one semester, with discussion hours to be arranged. Aerospace Engineering 321K and Computational Engineering 321K may not both be counted. Prerequisite: Aerospace Engineering 211K or Computational Engineering 211K; and Engineering Mechanics 319 with a grade of at least C- in each.

#### ASE 324L. Aerospace Materials Laboratory.

Study of the deformation and fracture behavior of materials used in aerospace vehicles. Structure-property relations, methods of characterizing material behavior, use of properties in the design process. Case histories. Written reports. Two lecture hours and three laboratory hours a week for one semester. Prerequisite: Engineering Mechanics 319 with a grade of at least C-.

#### ASE 325L. Cooperative Engineering.

This course covers the work period of aerospace engineering students in the Cooperative Engineering Program. Forty laboratory hours a week for three semesters. The student must complete Aerospace Engineering 325LX, 325LY, and 325LZ before a grade and degree credit are awarded. May be repeated for credit. Prerequisite: For 325LX, application to become a member of the Cooperative Engineering Program, approval of the dean, and appointment for a full-time cooperative work tour; for 325LY, Aerospace Engineering 325LX and appointment for a full-time cooperative work tour; for 325LZ, Aerospace Engineering 325LY and appointment for a full-time cooperative work tour.

#### ASE 225M. Cooperative Engineering.

This course covers the work period of aerospace engineering students in the Cooperative Engineering Program. Forty laboratory hours a week for two semesters. The student must complete Aerospace Engineering 225MA and 225MB before a grade and degree credit are awarded. Prerequisite: For 225MA, application to become a member of the Cooperative Engineering Program, approval of the dean, and appointment for a full-time cooperative work tour; for 225MB, Aerospace Engineering 225MA and appointment for a full-time cooperative work tour.

#### ASE 125N. Cooperative Engineering.

This course covers the work period of aerospace engineering students in the Cooperative Engineering Program. Forty laboratory hours a week for one semester. May be repeated for credit. Prerequisite: Aerospace Engineering 325LZ or 225MB, application to become a member of the Cooperative Engineering Program, approval of the dean, and appointment for a full-time cooperative work tour.

#### ASE 128. Aerospace Engineering Projects Laboratory.

Directed work on an organized student project in aerospace engineering or engineering mechanics. The equivalent of one lecture hour a week for one semester. May be repeated for credit. Offered on the pass/fail basis only. Prerequisite: At least fifteen semester hours of coursework, a University grade point average of at least 2.50, preparation of a laboratory participation log, and approval by both the faculty member directing the student project and the undergraduate adviser.

#### ASE 330M. Linear System Analysis.

Fundamentals of signals and systems; convolution; Laplace transforms; response of linear, time-invariant systems to standard inputs; frequency response methods; time-domain analysis; introduction to control systems. Three lecture hours a week for one semester. Prerequisite: Engineering Mechanics 311M, and Mathematics 427J or 427K with a grade of at least C- in each; and credit with a grade of at least C- or registration for Aerospace Engineering 211K (or 311) or Computational Engineering 211K.

#### ASE 333T. Engineering Communication.

Open only to aerospace engineering majors. Technical communication skills for engineers: written and oral reports; individual and collaborative composition; online and traditional research; editing techniques; document design for electronic and hard copy. Three lecture hours a week for one semester. Prerequisite: Rhetoric and Writing 306 or the equivalent with a grade of at least C-.

#### ASE 339. Advanced Strength of Materials.

Same as Engineering Mechanics 339. Curved beams, shear deformation, beam columns, beams on elastic foundations; inelastic behavior of members; elementary plate bending. Three lecture hours a week for one semester. Prerequisite: Engineering Mechanics 319 with a grade of at least C-.

#### ASE 346. Viscous Fluid Flow.

Navier-Stokes equations, laminar and turbulent boundary layers, transition, effects of pressure gradients, heat transfer, and compressibility. Three lecture hours a week for one semester. Prerequisite: Aerospace Engineering 320 with a grade of at least C-.

#### ASE 347. Introduction to Computational Fluid Dynamics.

Same as Computational Engineering 347. Development and implementation of finite-difference schemes for numerical solution of subsonic, transonic, and supersonic flows. Emphasis on convection and diffusion equations of fluid dynamics. Evaluation of accuracy, stability, and efficiency. Three lecture hours a week for one semester. Only one of the following may be counted: Aerospace Engineering 347, Computational Engineering 347, Mechanical Engineering 369L. Prerequisite: Aerospace Engineering 211K (or 311) or Computational Engineering 211K, and Aerospace Engineering 320 with a grade of at least C- in each.

#### ASE 355. Aeroelasticity.

Static aeroelastic phenomena; wing torsional divergence, control reversal, effect of wing sweep, flexibility effects on aircraft stability and control, and design implications; dynamic aeroelasticity; and galloping of transmission lines, flutter, and unsteady aerodynamics. Includes an introduction to experimental aeroelasticity. Three lecture hours a week for one semester. Prerequisite: Aerospace Engineering 320 and 365 with a grade of at least C- in each.

#### ASE 357. Mechanics of Composite Materials.

Anisotropic constitutive relationships, lamination theory, failure theories, micromechanical behavior of laminates; laminated composite plates-bending, vibration, and buckling; composite fabrication, sandwich and other composite lightweight structures. Three lecture hours a week for one semester. Prerequisite: Engineering Mechanics 319 with a grade of at least C-.

#### ASE 361K. Aircraft Design I.

Systems engineering based approach to conceptual design and analysis of an aircraft system to meet top-level mission requirements. Selected hands-on lab projects included. Three lecture hours and four laboratory hours a week for one semester. Prerequisite: Aerospace Engineering 320 with a grade of at least C-, and credit with a grade of at least C- or registration for Aerospace Engineering 367K.

#### ASE 361L. Aircraft Design II.

Systems Engineering based aircraft preliminary and detail design, build, flight test, and demonstration. The overall approach is applicable to all aircraft but the specific project is a small unmanned air system designed to meet defined mission requirements. Three lecture hours and four laboratory hours a week for one semester. Prerequisite: Aerospace Engineering 119K or 120K, and 361K with a grade of at least C- in each.

#### ASE 362K. Compressible Flow.

Shock and expansion waves, quasi-one-dimensional flow, convergingdiverging nozzles, diffusers, linearized flow, and compressibility effects on aerodynamics of airfoils and bodies. Three lecture hours a week for one semester. Prerequisite: Aerospace Engineering 320 with a grade of at least C-.

#### ASE 162M. High-Speed Aerodynamics Laboratory.

Experiments using a variable-Mach number supersonic wind tunnel and ballistics range. Aerodynamics of blunt bodies and simple airfoils in supersonic flow. One lecture hour and three laboratory hours a week for one semester. Prerequisite: Aerospace Engineering 362K with a grade of at least C-.

#### ASE 363L. History of Space Flight.

History and principles of space flight from early Chinese rocket experiments to Apollo 17 and the Space Shuttle; technological benefits from the space program and future space projects, including commercial space activities and those related to national security. Three lecture hours a week for one semester. May not be counted as an aerospace engineering course for the Bachelor of Science in Aerospace Engineering; may not be counted as a technical elective, a technical area course, or an engineering elective for any engineering degree. Prerequisite: Upper-division standing or consent of instructor.

#### ASE 364. Applied Aerodynamics.

Detailed analysis of aerodynamics of compressible and incompressible flows about wings and airfoils; wing and airfoil parameters and force and moment coefficients; and thin-airfoil theory, lifting-line theory, panel methods, high-lift devices, delta wings, transonic flows, and supersonic flows over wings. Three lecture hours a week for one semester. Aerospace Engineering 364 and 379L (Topic: Airfoil and Wing Design Theory) may not both be counted. Prerequisite: Aerospace Engineering 362K with a grade of at least C-.

#### ASE 365. Structural Dynamics.

Analysis of discrete and continuous vibrating systems; deriving equations of motion; determining response; and natural frequencies and modes of vibration. Three lecture hours a week for one semester. Prerequisite: Engineering Mechanics 319 with a grade of at least C-.

#### ASE 366K. Spacecraft Dynamics.

Basic satellite and spacecraft motion, orbital elements, coordinate systems, and transformations; orbit/trajectory design principles; basic three-dimensional spacecraft attitude dynamics. Three lecture hours a week for one semester. Prerequisite: Aerospace Engineering 211K (or 311) or Computational Engineering 211K, Engineering Mechanics 311M, and Mathematics 427J or 427K with a grade of at least C- in each.

#### ASE 366L. Applied Orbital Mechanics.

Selected subjects in satellite motion and satellite applications, including communication and navigation satellites, orbit selection/design for satellite applications, orbital coordinate systems, time, major perturbing forces, rendezvous and intercept, and interplanetary trajectories. Three lecture hours a week for one semester. Prerequisite: Aerospace Engineering 366K with a grade of at least C-.

#### ASE 166M. Spacecraft Systems Laboratory.

Overview of spacecraft subsystems, mission design program library, numerical techniques, mission planning references, mission constraints, and mission design projects. Includes written reports. One and onehalf lecture hours and one and one-half laboratory hours a week for one semester. Prerequisite: Aerospace Engineering 366K with a grade of at least C-, and credit with a grade of at least C- or registration for Aerospace Engineering 374K.

#### ASE 367K. Flight Dynamics.

Equations of motion for rigid aircraft; aircraft performance, weight and balance, static stability and control, and dynamic stability; design implications. Three lecture hours a week for one semester. Prerequisite: Aerospace Engineering 320 with a grade of at least C-.

#### ASE 370C. Feedback Control Systems.

Fundamentals of linear control analysis and design for single-input, single-output systems; stability and performance measures; Routh Hurwitz analysis; root locus methods; frequency response (Bode and Nyquist); introduction to full-state feedback. Three lecture hours a week for one semester. Aerospace Engineering 370C and 370L may not both be counted. Prerequisite: Aerospace Engineering 330M with a grade of at least C-.

#### ASE 170P. Controls Laboratory.

Three laboratory hours a week for one semester. Prerequisite: Aerospace Engineering 370L with a grade of at least C-.

#### ASE 372K. Attitude Dynamics.

Studies attitude representations, rotational kinematics, rigid-body dynamics, sensors and actuators, attitude determination, and passive and active attitude control systems. Three lecture hours a week for one semester. Prerequisite: Aerospace Engineering 366K with a grade of at least C-.

#### ASE 372L. Satellite Applications.

Classical and modern orbit determination, remote sensors and their outputs, pattern recognition, image enhancement, satellite data analysis projects. Three lecture hours a week for one semester. Prerequisite: Aerospace Engineering 366K with a grade of at least C-.

#### ASE 372N. Satellite-Based Navigation.

Satellite-based navigation systems, with focus on the Global Positioning System (GPS), ground and space segments, navigation receivers, satellite signal coordinate/time systems, denial of signal, differential techniques, GPS data analysis. Three lecture hours a week for one semester. Prerequisite: Aerospace Engineering 366K with a grade of at least C-.

#### ASE 374K. Space Systems Engineering Design.

Introduction to systems engineering: the systems engineering process, requirements, design fundamentals, trade studies, cost and risk analyses, integration, technical reviews, case studies, and ethics. Includes written reports. Three lecture hours a week for one semester. Aerospace Engineering 374K and Computational Engineering 373 may not both be counted. Prerequisite: Aerospace Engineering 366K with a grade of at least C-.

#### ASE 374L. Spacecraft/Mission Design.

Spacecraft systems characteristics, mission requirements, sensors, and consumables analyses; and mission phases, request for proposal, problem definition, ideation, proposal preparation, conceptual design review, preliminary design development and review, and design report preparation. Includes written reports. Two lecture hours and three laboratory hours a week for one semester. Prerequisite: Aerospace Engineering 166M and 374K with a grade of at least C- in each, and credit with a grade of at least C- or registration for Aerospace Engineering 376K.

#### ASE 375. Electromechanical Systems.

Restricted to aerospace engineering majors. Subjects include basic electronic circuits, operational amplifiers, concepts of impedance and feedback, sensors to measure temperature, displacement, strain, force and acceleration, impulse testing, shake testing, and triggered data acquisition. These concepts will be implemented via experiments that illustrate interesting phenomena in solids and structures. Two lecture hours and three laboratory hours a week for one semester. Aerospace Engineering 375 and Mechanical Engineering 340 may not both be counted. Prerequisite: Engineering Mechanics 319 and Physics 303L with a grade of at least C- in each.

#### ASE 376K. Propulsion.

Review of control volume analysis and quasi-one-dimensional compressible flow. Analysis and design of rocket nozzles and airbreathing engines, including performance and cycle analysis; the flow in nozzles, diffusers, compressors, and turbines; and combustion chamber processes and propellants. Includes an introduction to chemical and electric rocket propulsion. Three lecture hours a week for one semester. Prerequisite: Aerospace Engineering 362K with a grade of at least C-.

#### ASE 679H. Undergraduate Honors Thesis.

Research performed during two consecutive semesters under the supervision of an engineering faculty member; topics are selected jointly by the student and the faculty member with approval by the director of the Engineering Honors Program. The student makes an oral presentation and writes a thesis. Individual instruction for two semesters. Students pursuing both the Bachelor of Arts, Plan II, and a Bachelor of Science in Engineering may use this course to fulfill the thesis requirement for the Bachelor of Arts, Plan II. Prerequisite: For 679HA, enrollment in the Engineering Honors Program; for 679HB, Aerospace Engineering 679HA and enrollment in the Engineering Honors Program.

#### ASE 179K, 279K, 379K. Research in Aerospace Engineering.

Restricted to aerospace engineering majors. Directed study or research in a selected area of aerospace engineering. One, two, or three lecture hours a week for one semester. May be repeated for credit. Prerequisite: Upper-division standing, a University grade point average of at least 3.00, selection of project, and consent of the faculty member directing project and the undergraduate adviser.

#### ASE 379L. Studies in Aerospace Engineering.

Current topics in aerospace engineering. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 1: Selected Topics in Fluid Mechanics. Topic 2: Selected Topics in Structural Mechanics. Topic 3: Selected Topics in Flight Mechanics. Topic 4: Selected Topics in Orbital Mechanics. Topic 9: Selected Topics in Controls.

#### ASE 179R. Research Seminar.

Designed for students who plan to pursue a substantial research project or undergraduate honors thesis in aerospace engineering. Department faculty present information and lead discussions about their current research projects so that students can learn about available research opportunities. One lecture hour a week for one semester. May not be repeated for credit. Offered on the pass/fail basis only. Prerequisite: Completion of at least twenty-four semester hours of coursework and a University grade point average of at least 3.50.

#### ASE 179S, 279S, 379S, 479S, 579S, 679S, 779S, 879S, 979S. Topics in Aerospace Engineering.

Used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office or the school's International Engineering Education Programs. Credit is recorded as assigned by the study abroad adviser in the Department of Aerospace Engineering and Engineering Mechanics. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

### **Computational Engineering: COE**

#### **Lower-Division Courses**

#### COE 301. Introduction to Computer Programming.

Same as Aerospace Engineering 301. Basic computer programming concepts for engineering computations. Programming in MATLAB or similar computing environments is emphasized, but more advanced languages may also be discussed. Three lecture hours a week for one semester. Aerospace Engineering 301 and Computational Engineering 301 may not both be counted.

#### COE 311K. Engineering Computation.

Fundamental numerical methods and software tools used in engineering computation. Subjects include linear systems of equations, matrix computations, nonlinear equations, least squares approximations, interpolation, numerical integration and numerical solution of differential equations. Three lecture hours a week for one semester. Only one of the following may be counted: Aerospace Engineering 211K, 311, Computational Engineering 211K, 311K. Prerequisite: Aerospace Engineering 301 (or 201) or Computational Engineering 301 with a grade of at least C-; and credit with a grade of at least C or registration for Mathematics 427J or 427K.

#### COE 111L. Engineering Computation Laboratory.

Restricted to computational engineering majors. Programming exercises and applications of numerical methods. One and one-half laboratory hours a week for one semester. Prerequisite: Credit with a grade of at least C- or registration for Aerospace Engineering 211K or Computational Engineering 211K.

#### **Upper-Division Courses**

#### COE 321K. Computational Methods for Structural Analysis.

Same as Aerospace Engineering 321K. Matrix structural analysis of systems that can be idealized as being comprised of axial bar elements, beam elements, and frame elements. Notion of element-by-element assembly of the governing system of algebraic equations. A systematic introduction to (and use of) the fundamental idea of a weak statement of a boundary value problem, particularly as concerns the numerical treatment/approximation of such problems. Interpretation of the weakstatement in terms of the principle of virtual work. Galerkin's method as applied to structural analysis. An introduction to the classical Galerkin finite element method with application to structures and plane elasticity. Energy principles and their utility in solving problems in solid mechanics, as well as their connection to the finite element method. Three lecture hours a week for one semester, with discussion hours to be arranged. Aerospace Engineering 321K and Computational Engineering 321K may not both be counted. Prerequisite: Aerospace Engineering 211K or Computational Engineering 211K; and Engineering Mechanics 319 with a grade of at least C- in each.

#### COE 322. Scientific Computation.

Restricted to Computational Engineering majors. Explores the basic tools needed for developing scientific computing software. These include advanced programming languages (e.g. C, C++, python), object oriented programming and data structures. Subjects may include abstract data types; creation, initialization, and destruction of objects; class hierarchies; polymorphism, inheritance and dynamic binding; generic programming using templates, linked lists, queues, stacks, trees and algorithms such as searching, sorting, and hashing. Three lecture hours a week for one semester. Computational Engineering 322 and Statistics and Data Sciences 322 may not both be counted. Prerequisite: Aerospace Engineering 301 (or 201) or Computational Engineering 301 with a grade of at least C-.

#### COE 332. Software Engineering and Design.

Restricted to computational engineering majors. Covers methods and tools for planning, designing, implementing, validating and maintaining large software systems. May include project work to build a software system as a team, using appropriate software engineering tools and techniques. Three lecture hours a week for one semester. Prerequisite: Computational Engineering 322 with a grade of at least C-.

#### COE 347. Introduction to Computational Fluid Dynamics.

Same as Aerospace Engineering 347. Development and implementation of finite-difference schemes for numerical solution of subsonic, transonic, and supersonic flows. Emphasis on convection and diffusion equations of fluid dynamics. Evaluation of accuracy, stability, and efficiency. Three lecture hours a week for one semester. Only one of the following may be counted: Aerospace Engineering 347, Computational Engineering 347, Mechanical Engineering 369L. Prerequisite: Aerospace Engineering 211K (or 311) or Computational Engineering 211K, and Aerospace Engineering 320 with a grade of at least C- in each.

#### COE 352. Advanced Scientific Computation.

Restricted to computational engineering majors. Topics in advanced numerical methods and scientific computation. Subject matter may vary. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Mathematics 427J or 427K, and Statistics and Data Sciences 329C (or Statistics and Scientific Computation 329C) or Mathematics 340L with a grade of at least C- in each; and Computational Engineering 211K with a grade of at least C- or programming experience.

#### COE 371. Applied Mathematics I.

Restricted to computational engineering majors. Introduction to modern mathematics, real analysis of functions of one variable, linear operator theory and ordinary differential equations. Three lecture hours a week for one semester. Prerequisite: Upper-division standing; Mathematics 427J or 427K, 427L, and 362K with a grade of at least C- in each; Statistics and Data Sciences 329C (or Statistics and Scientific Computation 329C) or Mathematics 340L with a grade of at least C-.

#### COE 372. Applied Mathematics II.

Restricted to computational engineering majors. Elements of complex analysis, Fourier and Laplace transforms, partial differential equations, perturbation methods, analysis of functions of several variables. Three lecture hours per week for one semester. Prerequisite: Upper-division standing and Computational Engineering 371 with a grade of at least C-.

#### COE 373. Systems Engineering Design.

Restricted to computational engineering majors. Introduction to systems engineering: the systems engineering process, requirements, design fundamentals, trade studies, cost and risk analyses, integration, technical reviews, case studies, and ethics. Includes written reports. Three lecture hours a week for one semester. Aerospace Engineering 374K and Computational Engineering 373 may not both be counted. Prerequisite: Upper-division standing; Statistics and Data Sciences 222 or 322 (or Statistics and Scientific Computation 222 or 322) with a grade of at least C- and registration or credit with a grade of at least C- for Computational Engineering 352.

#### COE 374. Senior Design Project.

Restricted to computational engineering majors. Design and experimental projects done with teams of students from multiple engineering disciplines; the ethics of design for safety and reliability; emphasis on written and oral reporting of engineering projects. Three lecture hours and four laboratory hours a week for one semester. Prerequisite: Computational Engineering 373 with a grade of at least C-.

#### COE 679H. Undergraduate Honors Thesis.

Restricted to computational engineering majors. Research performed during two consecutive semesters under the supervision of an engineering faculty member; topics are selected jointly by the student and the faculty member with approval by the director of the Engineering Honors Program. Entails an oral presentation and a written thesis. Individual instruction for two semesters. Prerequisite: For 679HA, enrollment in the Engineering Honors Program; for 679HB, Computational Engineering 679HA and enrollment in the Engineering Honors Program.

## COE 179K, 279K, 379K. Research in Computational Engineering.

Restricted to computational engineering majors. Directed study or research in a selected area of computational engineering. For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit. Prerequisite: Upper-division standing, a University grade point average of at least 3.00, selection of project, and consent of the faculty member directing project and the undergraduate adviser.

### **Engineering Mechanics: E M**

#### **Lower-Division Courses**

#### E M 306 (TCCN: ENGR 2301). Statics.

Vector algebra, force systems, free-body diagrams; engineering applications of equilibrium, including frames, friction, distributed loads; centroids, moments of inertia. Three lecture hours and two discussion hours a week for one semester. Prerequisite: Mathematics 408D, 408L, 408M, or 408S, and Physics 301 or 303K with a grade of at least C- in each.

#### E M 311M (TCCN: ENGR 2302). Dynamics.

Two- and three-dimensional kinematics and dynamics, applied to a broad class of engineering problems. Three lecture hours and two discussion hours a week for one semester. Prerequisite: Engineering Mechanics 306, and Mathematics 408D or 408M with a grade of at least C- in each.

#### E M 319 (TCCN: ENGR 2332). Mechanics of Solids.

Internal forces and deformations in solids; stress and strain in elastic and plastic solids; application to simple engineering problems. Three lecture hours a week for one semester, with discussion hours if necessary. Prerequisite: Engineering Mechanics 306, and Mathematics 408D or 408M with a grade of at least C- in each.

#### E M 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Engineering Mechanics.

Used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office or the school's International Engineering Education programs. Credit is recorded as assigned by the study abroad adviser in the Department of Aerospace Engineering and Engineering Mechanics. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

### **Upper-Division Courses**

#### E M 339. Advanced Strength of Materials.

Same as Aerospace Engineering 339. Curved beams, shear deformation, beam columns, beams on elastic foundations; inelastic behavior of members; elementary plate bending. Three lecture hours a week for one semester. Prerequisite: Engineering Mechanics 319 with a grade of at least C-.

#### E M 360. Studies in Engineering Mechanics.

Advanced work in the various areas of engineering mechanics, based on recent developments. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing in engineering and consent of instructor.

Topic 4: Theory of Material Science. Topic 13: Applications of Finite Element Methods.

#### E M 179S, 279S, 379S, 479S, 579S, 679S, 779S, 879S, 979S. Topics in Engineering Mechanics.

Used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office or the school's International Engineering Education Programs. Credit is recorded as assigned by the study abroad adviser in the Department of Aerospace Engineering and Engineering Mechanics. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

# Department of Biomedical Engineering

### **Biomedical Engineering: BME**

#### **Lower-Division Courses**

#### BME 303. Introduction to Computing.

Restricted to biomedical engineering majors. Introduction to computing and programming, focusing on arithmetic and logic operations, processor architecture, and programming structures. Programming skills for solving problems using machine and assembly language programming. Emphasis is on biomedical engineering applications of computing. Three lecture hours and two recitation hours a week for one semester. Offered on the letter-grade basis only.

#### BME 303L. Introduction to Biomedical Engineering Design.

Restricted to biomedical engineering majors. Biomedical engineering design concepts with hands-on learning applications. Three lecture hours and three laboratory hours a week for one semester. Biomedical Engineering 102L and 203L, 303L may not both be counted. Offered on the letter-grade basis only.

#### BME 311. Network Analysis in Biomedical Engineering.

Restricted to biomedical engineering majors. Basic concepts in circuit analysis and design of systems for biomedical engineering; Ohm's law, Kirchhoff's laws, and nodal and loop analysis; Theyenin's and Norton's theorem; operational amplifiers; high-order circuit and basic AC circuit analysis using Fourier and Laplace transforms. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Physics 303K with a grade of at least C-; and credit with a grade of at least C- or registration for. Mathematics 427J or 427K, and Physics 303L.

## BME 313L. Introduction to Numerical Methods in Biomedical Engineering.

Restricted to biomedical engineering majors. Introduces principles and techniques of numerical analysis of biomedical engineering problems. Examines numerical methods of integration, differentiation, interpolation, curve fitting, data analysis, sampling and estimation, error analysis, analysis of ordinary differential equations, numerical modeling of biomedical engineering systems, symbolic computation, and scientific visualization. Three lecture hours and three laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: The following coursework with a grade of at least C-: Biomedical Engineering 303 or Electrical Engineering 306, Biomedical Engineering 303L (or 203L), and Mathematics 427J or 427K.

## BME 214L. Computational Fundamentals of Biomedical Engineering Design.

Restricted to biomedical engineering majors. Overview of computational methods used to model biomedical systems, analyze data, and assist in the engineering design process. Subjects and hands-on learning applications include 3D modeling tools and computer aided manufacturing, flow simulation, instrumentation, biomedical imaging modalities, and biomedical informatics. Two lecture hours and three laboratory hours a week for one semester. Biomedical Engineering 314 and 214L may not both be counted. Offered on the letter-grade basis only. Prerequisite: The following coursework with a grade of at least C-: Biomedical Engineering 303 or Electrical Engineering 306, Biomedical Engineering 303L (or 203L), and Physics 303K and 103M; and credit with a grade of at least C- or registration for. Biomedical Engineering 311, Mathematics 427J or 427K, and Physics 303L and 103N.

#### **Upper-Division Courses**

## BME 320. International Perspectives on Biomedical Engineering Design.

Activities to consider sociotechnical factors in designing clinically translatable solutions with a focus on international perspectives. Three lecture hours a week for one semester. Biomedical Engineering 320 and 377T (Topic: International Perspectives on Biomedical Engineering Design) may not both be counted.

#### BME 325L. Cooperative Engineering.

Restricted to biomedical engineering majors. Covers the work period of biomedical engineering students in the Cooperative Engineering Program. Forty laboratory hours a week for three semesters. The student must complete Biomedical Engineering 325LX, 325LY, and 325LZ before a grade and degree credit are awarded. Prerequisite: For 325LX, application to become a member of the Cooperative Engineering Program, approval of the dean, and appointment for a full-time cooperative work tour; for 325LY, Biomedical Engineering 325LX and appointment for a full-time cooperative work tour; for 325LZ, Biomedical Engineering 325LY and appointment for a full-time cooperative work tour.

#### BME 225M. Cooperative Engineering.

Restricted to biomedical engineering majors. Covers the work period of biomedical engineering students in the Cooperative Engineering Program. Forty laboratory hours a week for two semesters. The student must complete Biomedical Engineering 225MA and 225MB before a grade and degree credit are awarded. Prerequisite: For 225MA, application to become a member of the Cooperative Engineering Program, approval of the dean, and appointment for a full-time cooperative work tour; for 225MB, Biomedical Engineering 225MA and appointment for a full-time cooperative work tour.

#### BME 125N. Cooperative Engineering.

Restricted to biomedical engineering majors. Covers the work period of biomedical engineering students in the Cooperative Engineering Program. Forty laboratory hours a week for one semester. May be repeated for credit. Prerequisite: Biomedical Engineering 325LZ or 225MB, application to become a member of the Cooperative Engineering Program, approval of the dean, and appointment for a full-time cooperative work tour.

#### BME 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Biomedical Engineering.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Biomedical Engineering. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

#### BME 333T. Engineering Communication.

Restricted to biomedical engineering majors. Advanced communication skills for engineers, with emphasis on biomedical engineering topics. Strategies for written, visual, and interpersonal communication, and for oral presentation. Introduction to library research and to ethical decision making in biomedical engineering. Three lecture hours and one recitation hour a week for one semester. Offered on the letter-grade basis only. Prerequisite: English 303C (or 603A) or Rhetoric and Writing 306 with a grade of at least C-.

#### BME 335. Engineering Probability and Statistics.

Restricted to biomedical engineering majors. Fundamentals of probability, random processes, and statistics with emphasis on biomedical engineering applications. Includes hypothesis testing, regression, and sample size calculations. The equivalent of four lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: The following coursework with a grade of at least C-: Biomedical Engineering 303 or Electrical Engineering 306, and Mathematics 408D or 408M; and credit with a grade of at least C- or registration for Biomedical Engineering 313L (or 113L).

#### BME 336. Cancer Bioengineering.

Restricted to biomedical engineering majors. Comprehensive overview of the biology and pathology of cancer. Emphasis on the fundamental nature of cancer, the roles of genetics and the environment, and the contributions of heterotypic tissues in the tumor microenvironment. Exploration of current challenges in the field and ways that various engineering tools are transforming the future of cancer research. Three lecture hours a week for one semester. Biomedical Engineering 336 and 377T (Topic: Cancer Bioengineering) may not both be counted. Prerequisite: Upper-division standing, Biology 311C or 315H, and Biomedical Engineering 214L (or 314) with a grade of at least C- in each.

#### BME 339. Biochemical Engineering.

Restricted to biomedical engineering majors. Principles of fermentation and cell culture technologies; introduction to recombinant DNA technology and protein expression; the development of therapeutics, vaccines, and diagnostics using genetic engineering. The equivalent of four lecture hours a week for one semester. Only one of the following may be counted: Biology 335, Biomedical Engineering 339, Chemical Engineering 339, 379 (Topic: Introduction to Biochemical Engineering). Prerequisite: Upper-division standing, Biochemistry 369 (or Chemistry 369) and Biology 311C or 315H with a grade of at least C- in each.

#### BME 342. Biomechanics of Human Movement.

Restricted to biomedical engineering majors. Modeling and simulation of human movement; neuromuscular control; computer applications; introduction to experimental techniques. Three lecture hours a week for one semester. Prerequisite: Biomedical Engineering 344 with a grade of at least C-.

## BME 343. Biomedical Engineering Signal and Systems Analysis.

Restricted to biomedical engineering majors. Signals and systems representation; sampling and quantization; time and frequency domains; Laplace and z-transforms, transfer functions, and frequency response; two-port networks; Bode plots; convolution; stability; Fourier series; Fourier transform; AM/FM modulation; filter design; and applications in biomedical engineering. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: The following coursework with a grade of at least C-: Biomedical Engineering 311, 313L (or 113L), and Mathematics 427J or 427K.

#### BME 344. Biomechanics.

Restricted to biomedical engineering majors. Analysis and modeling of biomechanical systems at the macroscopic scale based on principles of statics, dynamics, and strength of materials. Three lecture hours a week for one semester. Biomedical Engineering 344 and 377T (Topic: Biomechanics) may not both be counted. Offered on the letter-grade basis only. Prerequisite: The following coursework with a grade of at least C-: Biomedical Engineering 303L (or 203L), Mathematics 427J or 427K, and Physics 303K.

#### BME 345. Graphics and Visualization Laboratory.

Restricted to biomedical engineering majors. Introduction to techniques for graphical display of biological data. Subjects include transformations, geometric modeling, and two- and three-dimensional display algorithms. Includes computational projects with biomedical applications. Four and one-half laboratory hours a week for one semester. Prerequisite: Electrical Engineering 422C and Mathematics 340L with a grade of at least C- in each.

## BME 245L. Experimental Principles of Biomedical Engineering Design.

Restricted to biomedical engineering majors. Exploration of biomedical engineering design principles through open-ended, hands-on research

applications involving mechanical testing, cell culture, and biomaterials. Analysis and interpretation of experimental data, including written reporting of outcomes in scientific journal format. Two lecture hours and three laboratory hours a week for one semester. Biomedical Engineering 221 and 245L may not both be counted. Offered on the letter-grade basis only. Prerequisite: The following coursework with a grade of at least C-: Biology 206L, Biomedical Engineering 214L (or 314), 333T, 335 and 344; and credit with a grade of at least C- or registration for Biomedical Engineering 365R.

#### BME 346. Computational Biomolecular Engineering.

Restricted to biomedical engineering majors. Introduction to computational structural biology and molecular modeling, including the fundamentals of biomolecular structure and molecular thermodynamics. The principles and applications of biomolecular modeling used to explore the critical relationship between structure, function, and thermodynamic driving forces in molecular biology. Two lecture hours and one and one-half laboratory hours a week for one semester. Prerequisite: The following coursework with a grade of at least C-: Biochemistry 369 (or Chemistry 369), Biology 311C or 315H, Biomedical Engineering 313L (or 113L), and one of the following: Biomedical Engineering 355, Chemistry 353 or 353M.

#### BME 347. Fundamentals of Biomedical Optics.

Restricted to biomedical engineering majors. Introduction to the field of biophotonics. Subjects include light scattering theory, tissue optical properties, analytical and numerical techniques for determining light propagation in tissue, light-tissue interactions, and bioheat transfer including solution methods. Three lecture hours a week for one semester. Biomedical Engineering 347 and 377T (Topic: Fundamentals of Biomedical Engineering Optical Imaging) may not both be counted. Prerequisite: Biomedical Engineering 353 and 261L (or 251) with a grade of at least C- in each.

#### BME 348. Modeling of Biomedical Engineering Systems.

Restricted to biomedical engineering majors. Lumped and distributed models of physiological system function from molecular through organismal levels. Linear system steady-state and transient behaviors. Interactions among multiple energy domains, including electrical, chemical, diffusional, mechanical, fluid, and thermal. Introduction to feedback control. Three lecture hours and two laboratory hours a week for one semester. Prerequisite: The following coursework with a grade of at least C-: Biomedical Engineering 311, 313L (or 113L), 314 or 214L, 343, and Mathematics 427J or 427K.

#### BME 349. Biomedical Instrumentation.

Restricted to biomedical engineering majors. Introduction to biomedical instrumentation, design, and applications. Emphasis on the complete instrumentation development cycle, design for bio-compatibility, safety and efficacy, and design considerations specific to various medical specialties. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Biomedical Engineering 343 with a grade of at least C-.

#### BME 350. Computational Methods for Biomedical Engineers.

Restricted to biomedical engineering majors. Study of and handson experiences with computational methods commonly employed in biomedical engineering research. Three lecture hours a week for one semester. Biomedical Engineering 350 and 377T (Topic: Computational Methods for Biomedical Engineers) may not both be counted. Prerequisite: The following coursework with a grade of at least C-: Biomedical Engineering 313L (or 113L), 214L (or 314), and 335.

#### BME 352. Engineering Biomaterials.

Restricted to biomedical engineering majors. Overview of properties of metallic, ceramic, polymeric, and composite biomaterials used in biomedical applications. Material synthesis and processing. Analysis of mechanical and chemical properties, including stress-strain. Material interactions with the body and blood. Soft and hard biomaterials applications. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Biochemistry 369 (or Chemistry 369) and Biomedical Engineering 344 with a grade of at least C- in each.

#### BME 353. Transport Phenomena in Living Systems.

Restricted to biomedical engineering majors. Modeling and analysis of momentum, energy, and mass transport in living systems. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: The following coursework with a grade of at least C-: Biomedical Engineering 214L (or 314), Mathematics 427J or 427K, and Physics 303L and 103N.

## BME 354. Molecular Sensors and Nanodevices for Biomedical Engineering Applications.

Restricted to biomedical engineering majors. Introduction to major types of molecular sensor systems, device miniaturization, and detection mechanisms, including molecular capture mechanisms; electrical, optical, and mechanical transducers; micro-array analysis of biomolecules; semiconductor and metal nanosensors; microfluidic systems; and microelectromechanical systems (MEMS, BioMEMS) fabrication and applications for biomedical engineering. Three lecture hours a week for one semester. Prerequisite: The following coursework with a grade of at least C-: Biomedical Engineering 313L (or 113L), 335, and 344.

#### BME 355. Molecular Engineering.

Restricted to biomedical engineering majors. Working principles of biomolecules such as proteins and nucleic acids. Physical and chemical basis for biomolecular structure, energetics, and function. Three hours of lecture a week for one semester. Offered on the letter-grade basis only. Prerequisite: The following coursework with a grade of at least C-: Biochemistry 369 (or Chemistry 369), Biology 311C or 315H, Mathematics 427J or 427K, and Physics 303L and 103N.

#### BME 357. Biomedical Imaging Modalities.

Restricted to biomedical engineering majors. Introduction to major biomedical imaging modalities, including X-ray radiography, computed tomography (CT), nuclear medicine (SPECT and PET), magnetic resonance imaging (MRI), and ultrasound. Emphasis on principles, approaches, and applications of each imaging modality. Basic physics and imaging equations of the imaging system; hardware and software; sources of noise and primary artifacts; safety and patient risk. Three lecture hours and two laboratory hours a week for one semester. Prerequisite: The following coursework with a grade of at least C-: Biomedical Engineering 348 or 349, and 261L (or 251).

#### BME 358. Medical Decision Making.

Restricted to biomedical engineering majors. Understanding of the nature of expertise and related subjects of cognitive psychology and human-made interaction to be able to design more effective systems for supporting medical decision making. Three lecture hours a week for one semester. Biomedical Engineering 358 and 377T (Topic: Medical Decision Making) may not both be counted. Prerequisite: The following coursework with a grade of at least C-: Biomedical Engineering 313L (or 113L), 214L (or 314), and 335.

#### BME 359. Cellular and Molecular Biomechanics.

Restricted to biomedical engineering majors. Introduction to the concepts needed to understand and work in the emerging field of cellular

and molecular biomechanics. Examination of dynamic interplay between chemical, thermal, and physical forces in determining the mechanics of cells/tissues and their molecular components. Three lecture hours a week for one semester. Prerequisite: Biomedical Engineering 344 and 353 with a grade of at least C- in each.

## BME 261L. Development and Analysis in Biomedical Engineering Design.

Restricted to biomedical engineering majors. The design and development of a working biomedical engineering device prototype. Focus on the full engineering design process, including reviews and documentation, and general project management strategies. Also considers the impact of markets, budgets, and the FDA on device requirements and design. Two lecture hours and three laboratory hours a week for one semester. Biomedical Engineering 251 and 261L may not both be counted. Offered on the letter-grade basis only. Prerequisite: Biomedical Engineering 343 and 245L (or 221) with a grade of at least Cin each.

## BME 362. Introduction to Nonlinear Dynamics in Biological Systems.

Restricted to biomedical engineering majors. Introduction to various concepts from nonlinear mathematics and their application to biological systems, ranging from sub-cellular to whole ecosystems levels of investigation. Three lecture hours a week for one semester. Biomedical Engineering 362 and 377T (Topic: Introduction to Nonlinear Dynamics in Biological Systems) may not both be counted. Prerequisite: Biomedical Engineering 313L (or 113L) and 344 with a grade of at least C- in each.

#### BME 362E. Medical Device Innovation.

Money, markets, and entrepreneurship with particular focus on medical and health markets. Two lecture hours a week for one semester. Additional hours to be arranged. Biomedical Engineering 362E and 277T (Topic: Medical Device Innovation: From Lab to Marketplace) may not both be counted.

#### BME 363E. Medical Device Design and Manufacturing.

Restricted to biomedical engineering majors. Application of engineering principles in the conception, design and prototyping of medical devices. Development of team projects with emphasis on clinical and market needs analysis, creative and useful concept generation, engineering requirements and specifications, and written and oral reporting of intermediate and final prototype outcomes. Three lecture hours a week for one semester. Biomedical Engineering 363E and 377T (Topic: Medical Device Design and Manufacturing) may not both be counted. Prerequisite: The following coursework with a grade of at least C-: Biomedical Engineering 343, 349, 353, and 261L (or 251.)

#### BME 365R. Quantitative Engineering Physiology I.

Restricted to biomedical engineering majors. A quantitative, modeloriented approach to human physiology, including basic cellular physiology, electrophysiology of nerve and muscle, the motor system, the central nervous system, and the cardiovascular system. The equivalent of four lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: The following coursework with a grade of at least C-: Biology 311C or 315H, Biomedical Engineering 214L (or 314), and Physics 303L and 103N; and credit with a grade of at least C- or registration for. Biochemistry 369 (or Chemistry 369) and Biomedical Engineering 343.

#### BME 365S. Quantitative Engineering Physiology II.

Restricted to biomedical engineering majors. Biological control systems: sensory, renal, respiratory, and immune systems. Focuses on a quantitative, model-oriented approach to physiological systems. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Biomedical Engineering 365R with a grade of at least C-.

#### BME 366. Immune Engineering.

Restricted to biomedical engineering majors. Introduction to various aspects and applications of immune engineering. Subjects include vaccine design, cancer immunotherapy, genomics, infection, autoimmune diseases and emerging tools and methodologies. Three lecture hours a week for one semester. Biomedical Engineering 366 and 377T (Topic: Immune Engineering) may not both be counted. Prerequisite: Biomedical Engineering 365R and 365S with a grade of at least C- in each.

#### BME 367. Design of Artificial Organs.

Restricted to biomedical engineering majors. Analysis of the design process for blood-contacting medical devices with an emphasis on ventricular assist devices. Application of computational fluid dynamics and blood rheology to computer-aided design and testing of devices using specific software programs and 3D printing of functioning prototypes. Three lecture hours a week for one semester. Biomedical Engineering 367 and 377T (Topic: Design of Artificial Organs) may not both be counted. Prerequisite: Credit with a grade of at least C- or registration for Biomedical Engineering 353 and 365R.

#### BME 370. Biomedical Engineering Capstone Design I.

Restricted to biomedical engineering majors. Structured methodologies for designing systems or to interface with living systems. Creative design, analysis, selection, development, and fabrication of biomedical components and systems. Three lecture hours and two laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: The following coursework with a grade of at least C-: Biomedical Engineering 348 or 349, 352, 353, 261L (or 251), and 365S.

#### BME 371. Biomedical Engineering Capstone Design II.

Restricted to biomedical engineering majors. Development of team projects in biomedical engineering with emphasis on prototype development and quantitative analysis, and written and oral reporting of the outcome. Two lecture hours and four laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Biomedical Engineering 370 with a grade of at least C-.

## BME 373. Tissue, Scaffold, and Cell Biomechanics Applications.

Restricted to biomedical engineering majors. Fundamentals of biosolid mechanics via the mechanical behavior of scaffolds and living tissues and cells. Emphasis on biomechanical applications to contemporary problems in biomedical research and medical devices. Three hours of lecture a week for one semester. Biomedical Engineering 373 and 377T (Topic: Cell, Tissue and Scaffold Biomechanics for Contemporary Biomedical Engineering Applications) may not both be counted. Prerequisite: Biomedical Engineering 344 and 352 with a grade of at least C- in each.

#### BME 374K. Biomedical Instrument Design.

Restricted to biomedical engineering, electrical engineering, and mechanical engineering majors. Application of electrical engineering principles in the design of electronic instrumentation at the circuitboard level for the measurement of pressure, temperature, flow, and impedance. Also includes the study of light intensity, bioelectric potentials, and stimulation devices such as pacemakers and defibrillators. Focus on design considerations specific to electro-medical environments, safety and efficacy, and public policy issues. Three lecture hours a week for one semester. Prerequisite: Biomedical Engineering 343 and Electrical Engineering 438 with a grade of at least C- in each.

#### BME 374L. Applications of Biomedical Instrumentation Lab.

Restricted to biomedical engineering, electrical engineering, and mechanical engineering majors. An in-depth examination of selected subjects in biomedical engineering, including optical and thermal properties of laser interaction with tissue; measurement of perfusion in the microvascular system; diagnostic imaging; interaction of living systems with electromagnetic fields; robotic surgical tools; ophthalmic instrumentation; and noninvasive cardiovascular measurements. Students have the opportunity to design analog and digital measurements and acquire and process meaningful biomedical signals. Three lecture hours and six laboratory hours a week for one semester. Prerequisite: The following coursework with a grade of at least C-: Electrical Engineering 438, and one of the following: Biomedical Engineering 349, 374K, or Electrical Engineering 374K.

#### BME 375. Stem Cells in Cell and Tissue Engineering.

Restricted to biomedical engineering majors. Analysis of recent cell and tissue engineering applications of human embryonic stem cells (hESC) and induced pluripotent stem cells (iPSC). Focus on case studies of each organ in the human body and how it can be engineered using stem cells. Three lecture hours a week for one semester. Biomedical Engineering 375 and 377T (Topic: Stem Cells in Cell and Tissue Engineering) may not both be counted. Prerequisite: Biomedical Engineering 352 and 365S with a grade of at least C- in each.

#### BME 376. Cell Engineering.

Restricted to biomedical engineering majors. Introduction to principles that govern the structure, organization, and processes at cellular and subcellular levels. Special focus on engineering and quantitative aspects of cellular machinery. Employs engineering approaches to study receptors, macromolecular complexes, and cellular signaling; clinical and pharmaceutical approaches to perturb cellular structure and function for disease prevention and drug design. State-of-the-art experimental and computational techniques to study cellular engineering. Three lecture hours a week for one semester. Prerequisite: The following coursework with a grade of at least C-: Biology 311C or 315H, and Biomedical Engineering 214L (or 314.)

#### BME 177, 277, 377. Undergraduate Research Project.

Restricted to biomedical engineering majors. Recommended for students considering graduate study. Topic is selected in conjunction with a faculty member in the Department of Biomedical Engineering or in another approved University department. A final written report or the equivalent is required. Three, six, or nine laboratory hours a week for one semester.

#### BME 377M. Medical Internship.

Restricted to biomedical engineering majors. Designed for students considering medical school. Students participate in a variety of medical and clinical activities, including clinical inpatient rounds, outpatient visits, operating room procedures, and medical grand rounds. The equivalent of three lecture hours a week for one semester.

#### BME 377R. Research Internship.

Restricted to biomedical engineering majors. Students perform biomedical research with a faculty member at an approved institution. Requires a substantial final report. The equivalent of three lecture hours a week for one semester.

#### BME 377S. Industrial Internship.

Restricted to biomedical engineering majors. Students conduct research in biomedical companies in Texas and nationwide. Research may include development, management, business administration, and other topics. Requires a substantial final report. The equivalent of three lecture hours a week for one semester.

#### BME 177T, 277T, 377T. Topics in Biomedical Engineering.

Restricted to biomedical engineering majors. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Prerequisites vary with the topic.

#### BME 678. Undergraduate Thesis in Biomedical Engineering.

Restricted to biomedical engineering majors. Research performed during two consecutive semesters under the supervision of a biomedical engineering faculty member or other approved faculty member; topics are selected jointly by the student and faculty member. The student provides a progress report at the end of the first semester and writes a thesis and gives an oral presentation at the end of the second semester. Individual instruction for two semesters. Students pursuing both the Bachelor of Arts, Plan II, and a Bachelor of Science in Biomedical Engineering may use this course to fulfill the thesis requirements for the Bachelor of Arts, Plan II. Prerequisite: For 678A, admission to the major sequence in biomedical engineering and a University grade point average of at least 3.50; for 678B, a University grade point average of at least 3.50 and Biomedical Engineering 678A.

#### BME 379. Tissue Engineering.

Restricted to biomedical engineering majors. Introduction to biomedical research in tissue engineering. Includes case studies of tissues and organs of the body, physiology and biology of tissue, pathologies of tissue, current clinical treatments, the role of engineers in development of new technologies to diagnose and treat pathologies, quantitative cellular and molecular techniques, and applications of synthetic and natural biomaterials. Three lecture hours a week for one semester. Only one of the following may be counted: Biomedical Engineering 379, Chemical Engineering 339T, 379 (Topic: Cell and Tissue Engineering). Prerequisite: Biomedical Engineering 352 and 365S with a grade of at least C- in each.

#### BME 679H. Undergraduate Honors Thesis.

Restricted to biomedical engineering majors. Research performed during two consecutive semesters under the supervision of an engineering faculty member; topics are selected jointly by the student and the faculty member with approval by the director of the Engineering Honors Program. The student makes an oral presentation and writes a thesis. Individual instruction for two semesters. Students pursuing both the Bachelor of Arts, Plan II, and a bachelor's degree in engineering may use this course to fulfill the thesis requirement for the Bachelor of Arts, Plan II. Prerequisite: For 679HA, enrollment in the Engineering Honors Program; for 679HB, Biomedical Engineering 679HA and enrollment in the Engineering Honors Program.

# Department of Chemical Engineering

### **Chemical Engineering: CHE**

#### **Lower-Division Courses**

#### CHE 102. Introduction to Chemical Engineering.

Restricted to freshmen. Introduction to chemical engineering, including problem solving and study skills. Opportunities and responsibilities of a career in chemical engineering. One lecture hour and one recitation hour a week for one semester. May not be counted toward any engineering degree. Offered on the pass/fail basis only.

#### CHE 210. Introduction to Computing.

Restricted to chemical engineering majors. Computer programming focusing on basics of computing, high-level programming environments, and spreadsheets, with application to chemical engineering. Two lecture hours and one laboratory hour a week for one semester. Chemical engineering majors must make a grade of at least C- in this course.

#### CHE 311. Engineering Sustainable Technologies.

Flows of materials and energy in engineering environments at local, regional, and global scales, and the interaction of those anthropogenic flows with natural cycles of materials and energy. Discusses biogeochemical flows (grand cycles) and anthropogenic material flows at the national level, in industrial sectors, and for consumer products. Three lecture hours a week for one semester. Prerequisite: A high school course in chemistry and experience with Internet searches.

#### CHE 317. Introduction to Chemical Engineering Analysis.

Principles and applications of material and energy balances in process analysis. Three lecture hours and one to two recitation hours a week for one semester. Chemical engineering majors must make a grade of at least C- in this course in order to take upper-division courses in chemical engineering. Prerequisite: Chemical Engineering 210, Chemistry 302, and Mathematics 408D with a grade of at least C- in each.

#### CHE 319. Transport Phenomena.

Restricted to chemical engineering majors. Basic study of momentum, energy, and mass transport. Includes viscous and turbulent flow, heat transfer, and mass diffusion. Three lecture hours and one to two recitation hours a week for one semester. Chemical Engineering 319 and Chemical Engineering 353 may not both be counted. Prerequisite: Chemical Engineering 317, and Mathematics 427J or 427K, with a grade of at least C- in each.

#### CHE 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Chemical Engineering.

Used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the McKetta Department of Chemical Engineering. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

### **Upper-Division Courses**

#### CHE 322. Thermodynamics.

Introductory course in thermodynamics with special reference to chemical process applications: basic laws, thermodynamic properties of single component systems, expansion and compression of fluids, heat engines, multicomponent systems, physical equilibrium, chemical equilibrium. Three lecture hours and one recitation hour a week for one semester. Chemical engineering majors must make a grade of at least Cin this course. Prerequisite: Chemical Engineering 210, 317, Chemistry 353, and Mathematics 427J or 427K, with a grade of at least C- in each.

#### CHE 322M. Molecular Thermodynamics.

Statistical and molecular concepts, especially the role of the microscopic chemical potential. Three lecture hours a week for one semester. Chemical Engineering 322M and 379 (Topic: Molecular Thermodynamics) may not both be counted. Prerequisite: Chemical Engineering 322.

## CHE 323. Chemical Engineering for Micro- and Nanofabrication.

Definition and description of the terminology and processes of microelectronics, including semiconductor facilities and chemical processes for integrated circuit manufacture, with an emphasis on unit processes; the major unit process, including thin-film metals and dielectrics deposition and etching, silicon oxidation and etching, ion implantation, diffusion, lithography, planarization, and process control; and an overview of promising nanopatterning and nanofabrication techniques, such as particle-beam imaging, nanoimprint, and nearfield probe imaging, implantation, diffusion, lithography, planarization, and process control. Three lecture hours a week for one semester. Prerequisite: Chemistry 328M and 328N.

#### CHE 325L. Cooperative Engineering.

This course covers the work period of chemical engineering students in the Cooperative Engineering Program. Forty laboratory hours a week for three semesters. The student must complete Chemical Engineering 325LX, 325LY, and 325LZ before a grade and degree credit are awarded. May be repeated for credit. Prerequisite: For 325LX, application to become a member of the Cooperative Engineering Program, approval of the dean, and appointment for a full-time cooperative work tour; for 325LY, Chemical Engineering 325LX and appointment for a full-time cooperative work tour; for 325LZ, Chemical Engineering 325LY and appointment for a full-time cooperative work tour.

#### CHE 225M. Cooperative Engineering.

Covers the work period of chemical engineering students in the Cooperative Engineering Program. Forty laboratory hours a week for two semesters. The student must complete Chemical Engineering 225MA and 225MB before a grade and degree credit are awarded. Prerequisite: For 225MA, application to become a member of the Cooperative Engineering Program, approval of the dean, and appointment for a fulltime cooperative work tour; for 225MB, Chemical Engineering 225MA and appointment for a full-time cooperative work tour.

#### CHE 125N. Cooperative Engineering.

This course covers the work period of chemical engineering students in the Cooperative Engineering Program. Forty laboratory hours a week for one semester. May be repeated for credit. Prerequisite: Chemical Engineering 325LZ or 225MB, application to become a member of the Cooperative Engineering Program, approval of the dean, and appointment for a full-time cooperative work tour.

#### CHE 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Chemical Engineering.

Used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the McKetta Department of Chemical Engineering. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

#### CHE 333T. Engineering Communication.

Advanced technical communication skills, with emphasis on writing strategies for technical documents, oral presentations, and visual aids. Three lecture hours a week for one semester. Prerequisite: Rhetoric and Writing 306 with a grade of at least C-.

#### CHE 335. Electrochemistry and Electrochemical Engineering.

Fundamental principles of electrochemistry combined with mass transfer including applications in analytical chemistry as well as industrial electrochemistry. Three lecture hours per week for one semester. Chemical Engineering 335 and 379 (Topic: Electrochemistry/ Chemical Engineering) may not both be counted. Offered on the lettergrade basis only. Prerequisite: Chemical Engineering 319 (or 353) and 322 with a grade of at least B+ in each.

## CHE 337. Quantitative Analysis of Cellular and Molecular Biology.

Analyzes biological systems from stoichiometric, thermodynamic, and kinetic perspectives. Case studies will illustrate how these principles are used to understand disease, control cellular behavior, and design protein-based therapeutics. Three lecture hours a week for one semester. Only one of the following may be counted: Biochemistry 350, Chemical Engineering 337, 379 (Topic: Quantitative Analysis of Cellular and Molecular Biology). Offered on the letter-grade basis only. Prerequisite: Biology 311D and Chemical Engineering 317.

#### CHE 338. Biochemical Engineering.

Restricted to chemical engineering majors. Introduction to basic biological processes including transcription, translation, protein/enzyme function, cellular energetics, protein secretion and modifications. Application of quantitative engineering principles to the analysis of biological processes, including thermodynamics, kinetics and stoichiometry. Three lecture hours and one discussion hour a week for one semester. Chemical Engineering 338 and 379 (Topic: Biochemical Engineering) may not both be counted. Offered on the letter-grade basis only. Prerequisite: Chemical Engineering 317 and 319.

#### CHE 339. Introduction to Biochemical Engineering.

Microorganisms in chemical and biochemical syntheses; genetic manipulation of cells by classical and recombinant DNA techniques. Enzyme technology; design of bioreactors and microbial fermentations; separations of biological products. Three lecture hours a week for one semester. Only one of the following may be counted: Biology 335, Biomedical Engineering 339, Chemical Engineering 339, 379 (Topic: Introduction to Biochemical Engineering). Prerequisite: Biology 311C and Chemistry 353.

#### CHE 339P. Introduction to Biological Physics.

Diffusion, dissipation, and driving forces in cellular processes. Locomotion of bacteria, basic modeling of biomolecular folding and binding events, osmotic flows, and self-assembly in cells. Three lecture hours a week for one semester. Chemical Engineering 339P and 379 (Topic: Molecular Driving Force in Biology) may not both be counted. Prerequisite: Chemical Engineering 319 (or 353), 322, and 253K with a grade of at least C- in each, or consent of the department.

#### CHE 339T. Cell and Tissue Engineering.

Introduction to biomedical research in tissue engineering. Includes case studies of tissues and organs of the body, physiology and biology of tissue, pathologies of tissue, current clinical treatments, the role of engineers in development of new technologies to diagnose and treat pathologies, quantitative cellular and molecular techniques, and applications of synthetic and natural biomaterials. Three lecture hours a week for one semester. Only one of the following may be counted: Biomedical Engineering 379, Chemical Engineering 339T, 379 (Topic: Cell and Tissue Engineering). Prerequisite: Biology 311C and Chemical Engineering 350.

#### CHE 341. Design for Environment.

Overview of environmental assessment tools for chemical processes and products, including life cycle and risk assessments. Overview of design tools for improving environmental performance of chemical processes, including unit operations and flowsheet analysis methods. Three lecture hours a week for one semester.

## CHE 342. Chemical Engineering Economics and Business Analysis.

Study of the economic decisions faced by chemical engineers. Discounted cash flow techniques. Personal finance, managerial economics, and other special topics. Three lecture hours a week for one semester. Only one of the following may be counted: Chemical Engineering 342, 384 (Topic: Chemical Engineering Economics and Business Analysis), 395G.

#### CHE 343. Molecular Simulation of Materials.

Introduction to basic molecular simulation techniques including molecular mechanics, molecular dynamics, and Monte Carlo method. Understanding of principles underlying these techniques, and how these techniques can be used to study the physical and chemical properties and behavior of materials at the molecular level. More advanced topics include molecular simulations in various ensembles (NVE, NVT, NPT, grand canonical), free energy computations, controlling dynamics, and association-bias Monte Carlo method. Elementary knowledge of physical chemistry, classical mechanics, and statistical thermodynamics is assumed. Three lecture hours a week for one semester. Chemical Engineering 343 and 379 (Topic: Simulation of Materials) may not both be counted. Offered on the letter-grade basis only. Prerequisite: Upperdivision standing.

## CHE 348. Numerical Methods in Chemical Engineering and Problem Solving.

Numerical solutions to algebraic and differential equations; numerical methods to integration, interpolation, and regression analysis, with application to chemical engineering. Three lecture hours and one recitation hour a week for one semester. Chemical engineering majors must make a grade of at least C- in this course. Prerequisite: Chemical Engineering 210, 317, and Mathematics 427J or 427K, with a grade of at least C- in each.

#### CHE 350. Chemical Engineering Materials.

Metallic, ceramic, polymeric, and composite materials. Crystal structures, phase diagrams, diffusion, and mechanical properties. Emphasis on structure-property-processing relationships. Three lecture hours a week for one semester. Prerequisite: Chemistry 353 with a grade of at least C-.

#### CHE 253K. Applied Statistics.

Statistical methods such as data exploration and summary, leastsquares fitting, probability and probability distributions, statistical inference and hypothesis testing, analysis of variance, design of experiments, statistical quality control, and use of professional statistical software. Two lecture hours a week for one semester. Chemical engineering majors must make a grade of at least C- in this course. Prerequisite: Chemical Engineering 210, 317, and Mathematics 427J or 427K, with a grade of at least C- in each.

## CHE 253M. Measurement, Control, and Data Analysis Laboratory.

Laboratory safety; measurement and statistical analysis of transport process variables like temperature, pressure, and flow rate; computer data acquisition; feedback control; statistical process control and design of experiments; and production of professional-level lab reports. Five laboratory hours a week for one semester. Prerequisite: Chemical Engineering 333T, 319 or 353, and 253K with a grade of at least C- in each.

#### CHE 354. Transport Processes.

Design and analysis of heat exchangers, fluid-flow systems and equipment, and interphase-contact devices. Three lecture hours and one recitation hour a week for one semester. Chemical engineering majors must make a grade of at least C- in this course. Prerequisite: Chemical Engineering 319 (or 353) with a grade of at least C-.

#### CHE 355. Introduction to Polymers.

Synthesis, structural characterization, physical properties, and applications of polymers. Three lecture hours a week for one semester. Prerequisite: Chemical Engineering 322.

#### CHE 356. Optimization: Theory and Practice.

Techniques of optimization, including formulation of optimization problems, one-dimensional search techniques, analytical methods, and n-dimensional search techniques; application of methods to processindustry problems. Three lecture hours a week for one semester. Prerequisite: Chemical Engineering 319 (or 353) and 348.

#### CHE 357. Technology and Its Impact on the Environment.

Study of sources and fates of environmental pollutants; environmental quality standards-their measurement and regulation; and pollution control design procedures. Three lecture hours a week for one semester. Prerequisite: Upper-division standing within the major or consent of department.

#### CHE 359. Energy Technology and Policy.

Technology and policy related to energy supply and demand, oil and gas production, coal utilization, hydrogen production, fuel cells, transportation, nuclear power, solar and wind energy, biomass utilization, energy conservation, and climate change. Three lecture hours a week for one semester. Only one of the following may be counted: Chemical Engineering 359, 379 (Topic: Energy Technology and Policy), 384 (Topic: Energy Technology and Policy).

#### CHE 360. Process Control.

Analysis of process dynamics and methods for the design of automatic control systems for chemical process plants. Three lecture hours and one to two recitation hours a week for one semester. Prerequisite: Chemical Engineering 322, 253M, and 354 with a grade of at least C- in each.

#### CHE 363. Separation Processes and Mass Transfer.

Design and analysis of equilibrium and mass transfer based on separations such as absorption, chromatography, crystallization, distillation, extraction, and membrane-based processes. Three lecture hours and one to two recitation hours a week for one semester. Chemical engineering majors must make a grade of at least C- in this course. Prerequisite: Chemical Engineering 319 (or 353) and 322 with a grade of at least C- in each.

## CHE 264. Chemical Engineering Process and Projects Laboratory.

Experimental studies of unit operations. Laboratory safety. Statistical data analysis. Written and oral reports. Six laboratory hours a week for one semester. Prerequisite: Chemical Engineering 253M and 363 with a grade in each of at least C-.

#### CHE 364S. Chemical Process Safety.

Emphasizes quantitative engineering analysis based on the application of mass and energy balances, fluid mechanics of incompressible, compressible and two-phase fluids, heat transfer and conservation of energy, diffusion and dispersion under highly variable conditions, reaction kinetics, and process control. Subjects include various probabilistic and statistical methods to characterize accident and loss performance, techniques for process hazard analysis, risk assessment, and accident investigations. Three lecture hours a week for one semester. Chemical Engineering 364S and 379 (Topic: Chemical Process Safety) may not both be counted. Offered on the letter-grade basis only. Prerequisite: Chemical Engineering 319 (or 353), 253K, and 354.

#### CHE 372. Chemical Reactor Analysis and Design.

Planning and design of commercial chemical and biochemical reaction systems for producing fuels, polymers, specialty and consumer products, pharmaceuticals, solid-state devices, and other products. Three lecture hours and one recitation hour a week for one semester. Chemical engineering majors must make a grade of at least C- in this course. Prerequisite: Chemical Engineering 322, 348, and 354 with a grade of at least C- in each.

#### CHE 473K. Process Design and Operations.

Process design, economics, and safety; design projects representing a variety of industries and products. Three lecture hours and two recitation hours a week for one semester. Prerequisite: Chemical Engineering 354, 363, and 372 with a grade of at least C- in each.

#### CHE 376K. Process Evaluation and Quality Control.

Use of statistical techniques to evaluate, compare, and optimize processes. Design of experiments for improved product quality control. Three lecture hours a week for one semester. Prerequisite: Upperdivision standing, and admission to an appropriate major sequence in engineering or consent of the department.

#### CHE 177K, 277K, 377K. Undergraduate Research Project.

Recommended for students considering graduate study. Topic to be selected in conjunction with individual chemical engineering faculty member, with approval by the department chair. A final written report is required. Three, six, or nine laboratory hours a week for one semester. Prerequisite: A grade point average of at least 3.00 in chemical engineering courses; students must submit an application to the undergraduate advising office.

#### CHE 177L, 277L, 377L. Undergraduate Research Project.

Subject matter to be selected in conjunction with individual chemical engineering faculty member, with approval by the department chair. A final written report is required. For every credit hour earned, three laboratory hours a week for one semester. Prerequisite: Chemical Engineering 177K, 277K, or 377K and a grade point average of at least 3.00 in chemical engineering coursework; students must submit application to the undergraduate advising office.

#### CHE 179, 279, 379, 479. Topics in Chemical Engineering.

Special topics of current interest. The equivalent of one, two, three, or four lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Consent of the department.

**Topic 43: Entrepreneurship.** Chemical Engineering 379 (Topic: Entrepreneurship) and 379 (Topic 43) may not both be counted **Topic 64: From Data to Decisions.** Chemical Engineering 379 (Topic: From Data to Decisions) and 379 (Topic 64) may not both be counted.

#### CHE 679H. Undergraduate Honors Thesis.

Research performed during two consecutive semesters under the supervision of a chemical engineering faculty member; topics are selected jointly by the student and the faculty member with approval by the department chair. The student makes two oral presentations and writes a thesis. Individual instruction for two semesters. Students pursuing both the Bachelor of Arts, Plan II, and the Bachelor of Science in Chemical Engineering may use this course to fulfill the thesis requirement for the Bachelor of Arts, Plan II. Prerequisite: For 679HA, enrollment in the Chemical Engineering Honors Program; for 679HB, enrollment in the Chemical Engineering Honors Program and credit for Chemical Engineering 679HA.

# Department of Civil, Architectural, and Environmental Engineering

## Architectural Engineering: ARE

### **Lower-Division Courses**

#### ARE 102. Introduction to Architectural Engineering.

Introduction to architectural engineering as a career by use of case studies. One lecture hour a week for one semester. Offered in the fall semester only. Prerequisite: A major in architectural engineering, civil engineering, or architecture, or consent of instructor.

#### ARE 217. Computer-Aided Design and Graphics.

Introduction to procedures in computer-aided design and computer graphics used in producing plans and three-dimensional electronic models associated with building design and construction. Three hours of lecture and laboratory a week for one semester. Prerequisite: Architectural Engineering 102.

#### ARE 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Architectural Engineering.

Used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Civil, Architectural and Environmental Engineering. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### **Upper-Division Courses**

#### ARE 320K. Introduction to Design I.

Introduction to design principles, concepts, and problem-solving approaches. Issues addressed by a series of two- and three-dimensional studies. Nine laboratory hours a week for one semester. Offered in the fall semester only. Prerequisite: Architectural Engineering 217, and credit or registration for Engineering Mechanics 319.

#### ARE 320L. Introduction to Design II.

Continuation of Architectural Engineering 320K. Focus on building design. Nine laboratory hours a week for one semester. Offered in the spring semester only. Prerequisite: Architectural Engineering 320K, and credit or registration for Civil Engineering 329.

#### ARE 323K. Project Management and Economics.

Solving economic problems related to construction and engineering; construction project management techniques; characteristics of construction organizations, equipment, and methods. Three lecture hours a week for one semester. Prerequisite: Civil Engineering 333T, and Mathematics 408D or 408M.

#### ARE 325L. Cooperative Engineering.

This course covers the work period of architectural engineering students in the Cooperative Engineering Program. Forty laboratory hours a week for three semesters. The student must complete Architectural Engineering 325LX, 325LY, and 325LZ before a grade and degree credit are awarded. May be repeated for credit. Prerequisite: For 325LX, application to become a member of the Cooperative Engineering Program, approval of the dean, and appointment for a full-time cooperative work tour; for 325LY, Architectural Engineering 325LX and appointment for a full-time cooperative work tour; for 325LZ, Architectural Engineering 325LY and appointment for a full-time cooperative work tour.

#### ARE 225M. Cooperative Engineering.

Covers the work period of architectural engineering students in the Cooperative Engineering Program. Forty laboratory hours a week for two semesters. The student must complete Architectural Engineering 225MA and 225MB before a grade and degree credit are awarded. Prerequisite: For 225MA, application to become a member of the Cooperative Engineering Program, approval of the dean, and appointment for a fulltime cooperative work tour; for 225MB, Architectural Engineering 225MA and appointment for a full-time cooperative work tour.

#### ARE 125N. Cooperative Engineering.

This course covers the work period of architectural engineering students in the Cooperative Engineering Program. Forty laboratory hours a week for one semester. May be repeated for credit. Prerequisite: Architectural Engineering 325LZ or 225MB, application to become a member of the Cooperative Engineering Program, approval of the dean, and appointment for a full-time cooperative work tour.

#### ARE 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Architectural Engineering.

Used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Civil, Architectural and Environmental Engineering. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### ARE 335. Materials and Methods of Building Construction.

Elements and properties of construction materials and components; fabrication and construction technologies, methods, and processes; engineering systems characteristic of commercial buildings such as foundation, structural, and building envelope systems. Three or four lecture and discussion hours a week for one semester. Prerequisite: Civil Engineering 324P.

#### ARE 345K. Masonry Engineering.

Behavior and design of masonry with respect to architectural, economic, and structural criteria. Four and one-half hours a week for one semester, including lecture and laboratory. Prerequisite: Civil Engineering 329 and credit or registration for Civil Engineering 331.

#### ARE 346N. Building Environmental Systems.

Analysis and design of building air conditioning systems; heating and cooling load calculations, air side systems analysis, air distribution, building electrical requirements, electrical and lighting systems. Three lecture hours a week for one semester. Prerequisite: Physics 303L, 103N, and one of the following: Mechanical Engineering 310T, 316T, 320, or 326.

#### ARE 346P. HVAC Design.

Design and analysis of heating, ventilation, and cooling systems for buildings. Focus on application of fundamental energy and mass transfer principles to HVAC components. Three lecture hours a week for one semester. Prerequisite: Architectural Engineering 346N.

#### ARE 358. Cost Estimating in Building Construction.

Building construction estimating from plans and specifications, unit prices, lump sum estimates, job sites, overhead, general overhead, and bidding procedures. Estimating methods throughout the design process. Two lecture hours and three supervised laboratory hours a week for one semester. Prerequisite: Architectural Engineering 335.

#### ARE 362L. Structural Design in Wood.

Engineering properties of wood; design of glued-laminated and lumber structural members, connections, and simple systems; introduction to shear walls and diaphragms. Five hours of lecture and supervised work a week for one semester. Prerequisite: Civil Engineering 329.

#### ARE 465. Integrated Design Project.

Design of low-rise buildings, including structural and environmental systems; preparation of contract documents. Six hours a week for one semester, including lecture and laboratory. Prerequisite: Architectural Engineering 320L, 346N, credit or registration for 335, Civil Engineering 331 or 335, and 357.

#### ARE 366. Contracts, Liability, and Ethics.

Legal aspects of engineering and construction contracts; contract formation, interpretation, rights and duties, and changes; legal liabilities and professional ethics of architects, engineers, and contractors. Two lecture hours and two laboratory hours a week for one semester. Prerequisite: Architectural Engineering 323K.

#### ARE 370. Design of Energy Efficient and Healthy Buildings.

Design and analysis of sustainable buildings, envelopes and facades, and energy and resource use in energy efficient and healthy buildings. Applies building science principles used to avoid moisture problems, minimize sick-building syndrome symptoms, and reduce energy use. Three lecture hours a week for one semester. Prerequisite: Architectural Engineering 346N.

#### ARE 371. Energy Simulation in Building Design.

Fundamentals of building energy simulations, analytical models for heat transfer in buildings, general numerical methods for solving equations from the analytical models, use of energy simulation tools in building design analysis, and parametric analyses used to study various operational parameters that affect energy use in buildings. Three lecture hours a week for one semester. Prerequisite: Architectural Engineering 346N.

#### ARE 372. Modeling of Air and Pollutant Flows in Buildings.

Fundamentals of indoor airflow modeling; use of computational fluid dynamics (CFD) for air quality and thermal comfort analyses; application of CFD for analysis of air velocity, temperature, humidity, and contaminant distributions with different ventilation systems. Three lecture hours a week for one semester. Prerequisite: Architectural Engineering 346N and Civil Engineering 319F.

#### ARE 376. Building Information Modeling for Capital Projects.

Focuses on the skills and information needed to effectively use an existing Building Information Model for a building construction project. In this project-based course, students gain knowledge on the implementation of BIM concepts throughout the life cycle of a building from planning and design to construction and operations. Three lecture hours and one and one-half laboratory hours a week for one semester. Prerequisite: Architectural Engineering 320L and 323K.

#### ARE 177K, 277K, 377K. Studies in Architectural Engineering.

Various specified topics or conference course. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester; additional hours may be required for some topics. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

#### ARE 377S. Emerging Technology: Survey.

Restricted to students in the Cockrell School of Engineering. Survey of building design technologies in engineering, architectural, and construction firms. Three lecture hours for one semester. Only one of the following may be counted: Architectural Engineering 377K (Topic: Emerging Technol: Tech Elec-GBR), 377K (Topic: Emerging Technol:Survey-GBR), 377S, or 377T. Offered on the letter-grade basis only. Prerequisite: Consent of Instructor.

#### ARE 377T. Emerging Technologies: Technical Elective.

Restricted to students in the Cockrell School of Engineering. Technical design within engineering, architecture, and construction. Three lecture hours for one semester. Only one of the following may be counted: Architectural Engineering 377K (Topic: Emerging Technol: Tech Elec-GBR), 377K (Topic: Emerging Technol:Survey-GBR), 377S, or 377T. Offered on the letter-grade basis only. Prerequisite: Upper-division standing; Architectural Engineering 320K and 320L; and consent of instructor.

#### ARE 679H. Undergraduate Honors Thesis.

Research performed during two consecutive semesters under the supervision of an engineering faculty member; topics are selected jointly by the student and the faculty member with approval by the director of the Engineering Honors Program. The student makes an oral presentation and writes a thesis. Individual instruction for two semesters. Students pursuing both the Bachelor of Arts, Plan II, and a bachelor's degree in engineering may use this course to fulfill the thesis requirement for the Bachelor of Arts, Plan II. Prerequisite: For 679HA, enrollment in the Engineering Honors Program; for 679HB, Architectural Engineering 679HA and enrollment in the Engineering Honors Program.

### **Civil Engineering: C E**

#### **Lower-Division Courses**

#### C E 301. Civil Engineering Systems.

Introduction to civil engineering as a career; engineering problem solving; use of computers for text, graphics, and data analysis; introduction to civil engineering measurements; breadth of disciplines within civil engineering; engineering ethics, sustainability. Two lecture hours and three laboratory hours a week for one semester.

#### C E 311K. Introduction to Computer Methods.

Organization and programming of civil engineering problems for computer solutions. Five hours a week for one semester, including lecture and laboratory. Prerequisite: Mathematics 408D or 408M.

#### C E 311S. Probability and Statistics for Civil Engineers.

Basic theory of probability and statistics with practical applications to civil engineering problems, including statistical inference and sampling. Additional subjects may include reliability and risk analyses, estimation and regression analyses, and experimental design. Three lecture hours and one laboratory hour a week for one semester. Prerequisite: Mathematics 408D or 408M.

#### C E 319F. Elementary Mechanics of Fluids.

Fluid properties, hydrostatics, elements of fluid dynamics, energy and momentum, boundary layers, similitude, pipe flow, metering instruments, drag forces. Three lecture hours and two laboratory hours a week for one semester. Civil Engineering 319F and Mechanical Engineering 330 may not both be counted. Prerequisite: Engineering Mechanics 306.

#### C E 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Civil Engineering.

Used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad

Office. Credit is recorded as assigned by the study abroad adviser in the Department of Civil, Architectural and Environmental Engineering. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### C E 321. Transportation Systems.

Planning, economics, location, construction, operation, maintenance, and design of transportation systems; concepts of various modes of transportation. Three lecture hours a week for one semester. Prerequisite: Civil Engineering 311S.

#### C E 324P. Properties and Behavior of Engineering Materials.

Structure, properties, and behavior of engineering materials, including concrete and metals. Laboratory exercises illustrate mechanical behavior of typical materials and demonstrate selected principles of mechanics. Three hours of lecture, and three hours of laboratory and supervised work a week for one semester. Civil Engineering 314K and 324P may not both be counted. Prerequisite: Chemistry 301, Civil Engineering 333T, and Engineering Mechanics 319.

#### C E 325L. Cooperative Engineering.

This course covers the work period of civil engineering students in the Cooperative Engineering Program. Forty laboratory hours a week for three semesters. The student must complete Civil Engineering 325LX, 325LY, and 325LZ before a grade and degree credit are awarded. May be repeated for credit. Prerequisite: For 325LX, application to become a member of the Cooperative Engineering Program, approval of the dean, and appointment for a full-time cooperative work tour; for 325LY, Civil Engineering 325LX and appointment for a full-time cooperative work tour; for 325LZ, Civil Engineering 325LY and appointment for a full-time cooperative work tour.

#### C E 225M. Cooperative Engineering.

Covers the work period of civil engineering students in the Cooperative Engineering Program. Forty laboratory hours a week for two semesters. The student must complete Civil Engineering 225MA and 225MB before a grade and degree credit are awarded. Prerequisite: For 225MA, application to become a member of the Cooperative Engineering Program, approval of the dean, and appointment for a full-time cooperative work tour; for 225MB, Civil Engineering 225MA and appointment for a full-time cooperative work tour.

#### C E 125N. Cooperative Engineering.

This course covers the work period of civil engineering students in the Cooperative Engineering Program. Forty laboratory hours a week for one semester. May be repeated for credit. Prerequisite: Civil Engineering 325LZ or 225MB, application to become a member of the Cooperative Engineering Program, approval of the dean, and appointment for a fulltime cooperative work tour.

#### C E 329. Structural Analysis.

Classical methods of analysis for determinate and indeterminate structures under stationary and moving loads. Three or four hours of lecture and supervised work a week for one semester. Prerequisite: Engineering Mechanics 319 and Civil Engineering 311K.

#### C E 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Civil Engineering.

Used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Civil, Architectural and Environmental Engineering.

University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### C E 331. Reinforced Concrete Design.

Design of reinforced concrete beams and columns. Five hours of lecture and supervised work a week for one semester. Prerequisite: Civil Engineering 324P (or 314K) and 329.

#### C E 333T. Engineering Communication.

Technical communication skills for engineers, especially researching and writing technical documents for many kinds of readers, managing and documenting sources of information, using and explaining graphics, delivering oral presentations, working collaboratively, and eliciting information from experts and stakeholders. Two lecture hours and one and one half laboratory hours a week for one semester. Prerequisite: Rhetoric and Writing 306.

#### C E 335. Elements of Steel Design.

Analysis and design of tension members, beams, columns, and bolted and welded connections. Five hours of lecture and supervised work a week for one semester. Prerequisite: Civil Engineering 324P (or 314K) and 329.

#### C E 341. Introduction to Environmental Engineering.

Quantitative evaluation of the environmental, economic, and technical problems involved in control of pollutants of the air, water, and land. Three lecture hours a week for one semester. Prerequisite: Chemistry 302 and Civil Engineering 319F.

#### C E 342. Water and Wastewater Treatment Engineering.

Application of chemical, biological, and physical principles to the analysis and design of treatment processes for drinking water, industrial process water, municipal wastewater, and water reuse applications. Three lecture hours a week for one semester. Prerequisite: Civil Engineering 341 or Environmental Engineering 312.

#### C E 346. Solid Waste Engineering and Management.

Characteristics of municipal and industrial solid wastes, generation rates, collection systems, recycling, processing, and disposal. Three lecture hours a week for one semester, with occasional field trips. Prerequisite: Civil Engineering 341 or Environmental Engineering 312.

#### C E 351. Concrete Materials.

Portland cement, aggregates, supplementary cementing materials, properties of fresh and hardened concrete, concrete durability, mixture proportioning, concrete construction, and special concretes. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: Civil Engineering 324P (or 314K).

#### C E 356. Elements of Hydraulic Engineering.

Flow in closed conduits, hydraulic machinery; open-channel flow; flow measurement; design of storm sewers. Five hours a week for one semester, including lecture and laboratory. Prerequisite: Civil Engineering 319F.

#### C E 357. Geotechnical Engineering.

Engineering properties of soils; hydraulic conductivity and shear strength of soils; soil compaction and consolidation; stresses with the soil mass; settlement of foundations of structures; laboratory measurements. Six hours a week for one semester, including lecture and laboratory. Prerequisite: Civil Engineering 319F and Engineering Mechanics 319.

#### C E 358. Introductory Ocean Engineering.

Wave theory and its applications to coastal engineering, wave energy conversion, and offshore structure technology. Includes fundamentals of inviscid and viscous flow of incompressible fluids, and applications of computational fluid dynamics (CFD) in design. Three lecture hours a week for one semester. Prerequisite: Civil Engineering 319F.

#### C E 360K. Foundation Engineering.

Effect of geotechnical conditions on the behavior, proportioning, and choice of foundation type; design of shallow and deep foundations; study of foundation case histories. Five hours a week for one semester, including lecture and discussion. Offered in the fall semester only. Prerequisite: Civil Engineering 357.

#### C E 362M. Advanced Reinforced Concrete Design.

Design of reinforced concrete buildings, including floor systems and structural walls. Five hours of lecture and supervised work a week for one semester. Prerequisite: Civil Engineering 331.

#### C E 362N. Advanced Steel Design.

Design of steel buildings, beam columns, composite beams, plate girders, and connections. Five hours of lecture and supervised work a week for one semester. Prerequisite: Civil Engineering 335.

#### C E 363. Advanced Structural Analysis.

Structural analysis for forces and deflections using stiffness and flexibility approaches; application of energy methods in structural analysis; stiffness methods for computer-based structural analysis. Three lecture hours a week for one semester. Prerequisite: Civil Engineering 329, and Mathematics 427J or 427K.

## C E 364. Design of Wastewater and Water Treatment Facilities.

Analysis, synthesis, and integrated design of municipal water and wastewater treatment plants with an emphasis on novel water conservation and water reuse applications. Three lecture hours a week for one semester; additional hours to be arranged for design laboratory and field trips. Prerequisite: Credit or registration for Civil Engineering 342 and credit for Civil Engineering 356.

#### C E 365K. Hydraulic Engineering Design.

Application of engineering hydraulics to watershed management and urban infrastructure design; engineering hydrology; open-channel hydraulics; remotely sensed data analysis; hydraulic and hydrologic modeling tools; urban water quality and low impact design. Three lecture hours a week for one semester. Prerequisite: Civil Engineering 356.

#### C E 366K. Design of Bituminous Mixtures.

Restricted to students admitted to major sequence in civil engineering. Fundamental properties of asphalt and aggregates, design and construction of asphalt mixtures, special mixtures, and superpave design method. Three lecture hours a week for one semester. Prerequisite: Civil Engineering 321.

#### C E 367G. Design and Evaluation of Ground-Based Transportation Systems.

Methods for design and evaluation of transportation systems, emphasizing roadway and non-motorized travel, in light of traveler safety, system operations, construction and maintenance costs, environmental impacts, and other considerations. Three lecture hours and two laboratory hours a week for one semester. Civil Engineering 367G and 377K (Topic: Design of Ground-Based Transportation) may not both be counted. Prerequisite: Civil Engineering 321.

#### C E 367P. Pavement Design and Performance.

Basic principles of design of pavements for highways, airfields, and railroads; pavement construction, maintenance, and rehabilitation. Three lecture hours a week for one semester. Prerequisite: Civil Engineering 324P.

## C E 367R. Optimization Techniques for Transportation Engineers.

Overview of optimization techniques, including linear programming, nonlinear optimization, and network flow algorithms including shortest path, maximum flow, and minimum spanning tree. Examples and applications primarily drawn from transportation engineering, with connections to other areas. Three lecture hours a week for one semester. Civil Engineering 367R and 377K (Topic: Optimization Techniques for Transportation Engineers) may not both be counted. Prerequisite: Civil Engineering 321.

#### C E 367T. Traffic Engineering.

Driver and vehicle characteristics, traffic studies, traffic laws and ordinances, intersection capacity, signs, markings, signals, bus transit, parking, design of street systems, and operational controls. Three lecture hours a week for one semester. Prerequisite: Civil Engineering 321.

#### C E 369L. Air Pollution Engineering.

Characterization of sources, emissions, transport, transformation, effects, and control of outdoor and indoor air pollutants. Applications of chemistry, thermodynamics, and fluid mechanics in the selection and design of air pollution control equipment. Three lecture hours a week for one semester. Prerequisite: Civil Engineering 341 or Environmental Engineering 312.

#### C E 369R. Indoor Air Quality.

Sources, properties, transport and fate, human exposure, and adverse responses to indoor air pollutants. Control strategies and engineered technologies to mitigate impacts of gaseous and particle phase air pollutants in indoor environments. Three lecture hours a week for one semester. Civil Engineering 369R and 377K (Topic: Indoor Air Quality) may not both be counted. Prerequisite: Civil Engineering 311K and 319F; and Architectural Engineering 346N or Civil Engineering 341 or Environmental Engineering 312.

#### C E 370K. Environmental Sampling and Analysis.

Principles of environmental chemistry; measurement of contaminants in air, water, and land environments; applications to municipal, industrial, and ambient samples. Six hours a week for one semester, including lecture and laboratory. Prerequisite: Civil Engineering 341.

#### C E 370P. Engineering Professionalism.

Examines professional engineering licensure, ethics, leadership, public service, and public policy, with an emphasis on multidisciplinary perspectives, legal and business considerations, and the importance of lifelong learning. Includes participation in a culminating major design project in public service, reflecting knowledge from technical electives and base level coursework. Three lecture hours a week for one semester. Only one of the following may be counted: Civil Engineering 177K (Topic: Engineering Professionalism), 370P and 171P. Prerequisite: Credit for any three of the following courses: Architectural Engineering 335, 345K, 358, 362L, or 366; Civil Engineering 331, 335, 351, 342, 346, 358, 360K, 362M, 362N, 363, 364, 365K, 366K, 367G, 367P, 367T, 367R, 369L, 369R, 370K, 374L, 374K or 375. Credit for Architectural Engineering 323K, Civil Engineering 321, 324P, 329, 341, 356, and 357.

#### C E 171P. Engineering Professionalism.

Examines professional engineering licensure, ethics, leadership, public service, and public policy, with an emphasis on multidisciplinary

perspectives, legal and business considerations, and the importance of lifelong learning. Includes participation in a culminating major design project in public service, reflecting knowledge from technical electives and base level coursework. Two lecture hours a week for one semester, with additional fieldwork hours to be arranged. Only one of the following may be counted: Civil Engineering 177K (Topic: ENGINEERING PROFESSIONALISM), 370P and 171P. Prerequisite: Credit or registration for one of the following: Civil Engineering 360K, 362M, 362N, 364, 365K, or 367G.

#### C E 374K. Hydrology.

Phases of the hydrologic cycle and associated transport processes; land surface-atmosphere interaction; soil infiltration; rainfall runoff; unit hydrograph; flow routing; hydrologic statistics; and extreme events, including design storms and flows. Three lecture hours a week for one semester. Prerequisite: Civil Engineering 311S and 356.

#### C E 374L. Groundwater Hydraulics.

Darcy's law, steady flow in aquifers, aquifer and well testing, regional flow, numerical simulation of groundwater flow, unsaturated flow, and groundwater recharge. Three lecture hours a week for one semester. Prerequisite: Civil Engineering 356.

#### C E 375. Earth Slopes and Retaining Structures.

Earth fills, excavations, and dams; soil compaction and ground improvement, seepage and dewatering; stability of natural slopes and embankments; earth-pressure theories; design of earth retaining structures. Three lecture hours a week for one semester. Offered in the spring semester only. Prerequisite: Civil Engineering 357.

#### C E 177K, 277K, 377K. Studies in Civil Engineering.

Various specified topics or conference course. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. Additional hours may be required for some topics. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

#### C E 679H. Undergraduate Honors Thesis.

Research performed during two consecutive semesters under the supervision of an engineering faculty member; topics are selected jointly by the student and the faculty member with approval by the director of the Engineering Honors Program. The student makes an oral presentation and writes a thesis. Individual instruction for two semesters. Students pursuing both the Bachelor of Arts, Plan II, and a bachelor's degree in engineering may use this course to fulfill the thesis requirement for the Bachelor of Arts, Plan II. Prerequisite: For 679HA, enrollment in the Engineering Honors Program; for 679HB, Civil Engineering 679HA and enrollment in the Engineering Honors Program.

### **Environmental Engineering: EVE**

#### **Lower-Division Courses**

#### EVE 302. Foundations of Environmental Engineering.

Foundational principles in environmental engineering, sources of contaminants, physics and chemistry of water, air, soil, concepts and tools for assessing sustainability. Three lecture hours and two laboratory hours a week for one semester. Prerequisite: Credit or registration for Chemistry 302.

#### EVE 310. Sustainable Systems Engineering.

Integration and optimization of engineering systems for water treatment, water reuse, and energy production processes given technical, economic, and environmental constraints. Three lecture hours a week for one semester. Prerequisite: Credit or registration for Physics 303L.

#### EVE 312. Environmental Engineering and Science.

Quantitative evaluations of environmental processes including mass and energy balances, mass and heat transfer, chemical kinetics, water quality modeling, water treatment, indoor and outdoor air quality, and risk analyses. Two lecture hours and three laboratory hours a week for one semester. Prerequisite: Environmental Engineering 302 and credit or registration for Civil Engineering 333T and Mathematics 427J.

#### **Upper-Division Courses**

#### EVE 350. Environmental Chemistry for a Sustainable World.

Application of chemical concepts to understand the fate of contaminants in natural and engineered systems. Focus on the use of analytical and graphical tools for solving chemical equilibrium and kinetic problems. Three lecture hours a week for one semester. Prerequisite: Environmental Engineering 312.

#### EVE 360. Design for Air Quality Improvement.

Analysis, synthesis, and integrated design of air pollution control systems for improvements in outdoor and indoor air quality. Design for reduction of high impact pollutants of local, regional and global significance with consideration of human inhalation exposure and climate impacts. Three lecture hours a week for one semester, with additional hours to be arranged for design laboratory, system testing, and field trips. Prerequisite: Civil Engineering 319F and 333T; and Civil Engineering 369L or 369R; and Mechanical Engineering 320 or 326.

## EVE 370. Design for Environmental Community Improvement.

Application of engineering to a project that addresses a local, national or international community or design challenge. Problem statement, project objectives, stakeholder input, technical problem solving, environmental, social and economic assessment is performed collaboratively within a multidisciplinary team to develop a final design for a comprehensive service-learning project. Three lecture hours a week for one semester, with additional hours to be arranged for design laboratory. Prerequisite: Civil Engineering 342 or 369L.

#### EVE 177K, 277K, 377K. Topics in Environmental Engineering.

Various specified topics or conference course. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

# Department of Electrical and Computer Engineering

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

### **Electrical Engineering: E E**

#### **Lower-Division Courses**

## E E 302 (TCCN: ENGR 2305). Introduction to Electrical Engineering.

The scope and nature of professional activities of electrical engineers, including problem-solving techniques; analysis and design methods; engineering professional ethics; analysis of analog resistive circuits, including Thevenin/Norton equivalents, mesh analysis, and nodal analysis; and operational amplifiers (DC response). Substantial teamwork is required for laboratory work in this course. Three lecture hours and two laboratory hours a week for one semester. Electrical Engineering 302 and 302H may not both be counted. Prerequisite: Credit with a grade of at least C- or registration for Mathematics 408C or 408K.

#### E E 302H. Introduction to Electrical Engineering: Honors.

Restricted to students in the Engineering Honors Program. The scope and nature of professional activities of electrical engineers, including problem-solving techniques; analysis and design methods; engineering professional ethics; analysis of analog resistive circuits, including Thevenin/Norton equivalents, mesh analysis, and nodal analysis; and operational amplifiers (DC response). Three lecture hours and two laboratory hours a week for one semester. Electrical Engineering 302 and 302H may not both be counted. Prerequisite: Credit with a grade of at least C- or registration for Mathematics 408C or 408K.

#### E E 306. Introduction to Computing.

Motivated, bottom-up introduction to computing; bits and operations on bits; number formats; arithmetic and logic operations; digital logic; the Von Neumann model of processing, including memory, arithmetic logic unit, registers, and instruction decoding and execution; introduction to structured programming and debugging; machine and assembly language programming; the structure of an assembler; physical input/ output through device registers; subroutine call/return; trap instruction; stacks and applications of stacks. Three lecture hours and one recitation hour a week for one semester. Prerequisite: Credit with a grade of at least a C- or registration for Mathematics 408C or 408K.

#### E E 307E. Elements of Electrical and Computer Engineering.

Introduction to electrical engineering: direct current circuit analysis, resistors, LEDs, switches, current and voltage measurements. Introduction to computer engineering: number systems, digital logic, storage, finite state machines, programming basics, microcontrollers. Three lecture hours and one lab hour a week for one semester. Electrical Engineering 307S (Topic: ELEMENTS OF ELEC/COMP ENGR) and 307E may not both be counted. Prerequisite: Consent of the instructor

#### E E 107S, 207S, 307S, 407S, 507S, 607S, 707S, 807S, 907S. Topics in Electrical Engineering.

Used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Electrical and Computer Engineering. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### E E 108S. Topics in Technical Skills.

Build a specific technical skill. The equivalent of one lecture and one lab hour a week for one semester. May be repeated for credit when the topics vary. Offered on the pass/fail basis only. Prerequisite: Consent of instructor.

#### E E 109K, 209K, 309K, 409K. Topics in Electrical Engineering.

For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Consent of instructor.

#### E E 309S. Development of a Solar-Powered Vehicle.

Analysis, design, and construction of a solar-powered car for national competitions involving other universities. Study of electrical, mechanical, and aerodynamic systems. Three lecture hours and three laboratory hours a week for one semester. Electrical Engineering 309K (Topic:

Development of a Solar Car for NASC) and 309S may not both be counted.

#### E E 411. Circuit Theory.

Capacitance and inductance; first- and second-order transient circuit response, including operational amplifier circuits; sinusoidal steady state analysis; Bode plots; complex power in single and balanced threephase systems; transformers; two-port networks (Z-parameters and Yparameters); and computer-aided analysis and design. Three lecture hours and two recitation hours a week for one semester. Prerequisite: Electrical Engineering 302 or 302H with a grade of at least C-; credit with a grade of at least C- or registration for Mathematics 427J or 427K, and Physics 303L and 103N.

#### E E 312. Software Design and Implementation I.

Basic problem solving, design and implementation techniques for imperative programming; structured programming in the C/C++ language; programming idioms; introduction to software design principles, including modularity, coupling and cohesion; introduction to software engineering tools; elementary data structures; asymptotic analysis. Three lecture hours and one recitation hour a week for one semester. Electrical Engineering 312 and 312H may not both be counted. Prerequisite: The following coursework with a grade of at least C-: Biomedical Engineering 303 or Electrical Engineering 306, and Electrical Engineering 319K.

#### E E 312H. Software Design and Implementation I.

Basic problem solving, design, and implementation techniques for imperative programming; structured programming in the C/C++ language; programming idioms; introduction to software design principles, including modularity, coupling and cohesion; introduction to software engineering tools; elementary data structures; asymptotic analysis. Three lecture hours and one recitation hour a week for one semester. Electrical Engineering 312 and 312H may not both be counted. Prerequisite: The following coursework with a grade of at least B in each: Biomedical Engineering 303 or Electrical Engineering 306, and Electrical Engineering 319K.

#### E E 313. Linear Systems and Signals.

Representation of signals and systems; system properties; sampling; Laplace and z-transforms; transfer functions and frequency response; convolution; stability; Fourier transform; feedback; and control applications. Computer analysis using MATLAB or Python. Three lecture hours a week for one semester. Prerequisite: Biomedical Engineering 311, Electrical Engineering 411, or 331 with a grade of at least C-; Mathematics 427J or 427K with a grade of at least C-; and credit with a grade of at least C- or registration for Mathematics 340L.

#### E E 316. Digital Logic Design.

Boolean algebra; analysis and design of combinational and sequential logic circuits; state machine design and state tables and graphs; simulation of combinational and sequential circuits; applications to computer design; and introduction to hardware description languages (HDLs) and field-programmable gate arrays (FPGAs). Three lecture hours and one recitation hour a week for one semester. Prerequisite: Biomedical Engineering 303, Computer Science 429, or Electrical Engineering 306 with a grade of at least C-.

#### E E 319K. Introduction to Embedded Systems.

Embedded systems; machine language execution; assembly and C language programming; local variables and subroutines; input/output synchronization; analog to digital conversion and digital to analog conversion; debugging; and interrupts. Three lecture hours and one laboratory hour a week for one semester. Prerequisite: Biomedical Engineering 303 or Electrical Engineering 306 with a grade of at least C-.

### **Upper-Division Courses**

#### E E 321K. Mixed Signal and Circuits Laboratory.

Digital and analog parametric testing of mixed-signal circuits and systems, including frequency response, harmonic and intermodulation, and noise behavior; use of system-level test equipment, including network analyzers, spectrum analyzers, and probe stations; coherent v. noncoherent measurements; design for testability. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: Electrical Engineering 438 with a grade of at least C-; and credit with a grade of at least C- or registration for Aerospace Engineering 333T, Biomedical Engineering 333T, Chemical Engineering 333T, Civil Engineering 333T, Electrical Engineering 333T, Mechanical Engineering 333T, or Petroleum and Geosystems Engineering 333T.

#### E E 422C. Software Design and Implementation II.

Methods for engineering software with a focus on abstraction; specification, design, implementation, and testing of object-oriented code using a modern development tool-set for complex systems; design and implementation of object-oriented programs in Java; abstract data types; inheritance; polymorphism; parameterized types and generic programming; the operation and application of commonly used data structures; exception handling and fault tolerance; introduction to algorithm analysis; teamwork models. Three lecture hours and one and one-half laboratory hours a week for one semester. Prerequisite: Computer Science 312 or Electrical Engineering 312 or 312H with a grade of at least C-.

#### E E 325. Electromagnetic Engineering.

Electrostatics and magnetostatics; properties of conductive, dielectric, and magnetic materials; solutions of Maxwell's equations; uniform plane wave applications; frequency- and time-domain analyses of transmission lines. Three lecture hours a week for one semester. Prerequisite: Electrical Engineering 411, Mathematics 427J or 427K, Physics 303L, and 103N with a grade of at least C- in each; and credit with a grade of at least C- or registration for Mathematics 427L.

#### E E 325K. Antennas and Wireless Propagation.

Solutions of time-varying Maxwell's equations with applications to antennas and wireless propagation; antenna theory and design, array synthesis; electromagnetic wave propagation, scattering, and diffraction; numerical methods for solving Maxwell's equations. Three lecture hours a week for one semester. Prerequisite: Electrical Engineering 325 with a grade of at least C-.

#### E E 325L. Cooperative Engineering.

This course covers the work period of electrical and computer engineering students in the Cooperative Engineering Program. Forty laboratory hours a week for three semesters. The student must complete Electrical Engineering 325LX, 325LY, and 325LZ before a grade and degree credit are awarded. May be repeated for credit. Prerequisite: For 325LX, application to become a member of the Cooperative Engineering Program, approval of the dean, and appointment for a fulltime cooperative work tour; for 325LY, Electrical Engineering 325LX and appointment for a full-time cooperative work tour; for 325LZ, Electrical Engineering 325LY and appointment for a full-time cooperative work tour.

#### E E 225M. Cooperative Engineering.

This course covers the work period of electrical engineering students in the Cooperative Engineering Program. Forty laboratory hours a week for two semesters. The student must complete Electrical Engineering 225MA and 225MB before a grade and degree credit are awarded. Prerequisite: For 225MA, application to become a member of the Cooperative Engineering Program, approval of the dean, and appointment for a full-time cooperative work tour; for 225MB, Electrical Engineering 225MA and appointment for a full-time cooperative work tour.

#### E E 125N. Cooperative Engineering.

This course covers the work period of electrical engineering students in the Cooperative Engineering Program. Forty laboratory hours a week for one semester. May be repeated for credit. Prerequisite: Electrical Engineering 325LZ or 225MB, application to become a member of the Cooperative Engineering Program, approval of the dean, and appointment for a full-time cooperative work tour.

#### E E 125S. Internship in Electrical and Computer Engineering.

Practical work experience in industry or a research lab under the supervision of an engineer or scientist. Requires a substantial final report. At least ten hours of work a week, for a total of 150 hours a semester or summer session. May be repeated for credit, but only three hours may be counted toward an electrical engineering degree. May be repeated for credit. Offered on the pass/fail basis only. Prerequisite: Consent of the undergraduate adviser.

#### E E 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Electrical Engineering.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Electrical and Computer Engineering. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### E E 331. Electrical Circuits, Electronics, and Machinery.

Not open to electrical engineering majors. Brief theory of direct and alternating current circuits; single-phase and three-phase power transmission; electronic devices and instrumentation; electromechanics. Three lecture hours a week for one semester. Prerequisite: Mathematics 408D or 408M with a grade of at least C-, and Physics 303L and 103N with a grade of at least C- in each.

#### E E 333T. Engineering Communication.

Restricted to electrical engineering majors. Advanced engineering communication skills, with emphasis on technical documents, oral reports, and graphics; collaborative work involving online communication and research. Three lecture hours a week for one semester. Prerequisite: Electrical Engineering 312 or 313 with a grade of at least C-, and one of the following with a grade of at least C-: English 316L, 316M, 316N, or 316P, (or 316K).

## E E 334K. Quantum Theory of Engineering Electronic Materials.

Introduction to quantum mechanics; atoms and molecules; electron statistics; quantum theory of solids; electronic phenomena in semiconductors; and device applications based on these phenomena. Three lecture hours a week for one semester. Prerequisite: Mathematics 427J or 427K, Physics 303L, and 103N with a grade of at least C- in each.

#### E E 438. Fundamentals of Electronic Circuits I Laboratory.

Analysis and design of electronic circuits using semiconductor devices. Basic device physics and small-signal modeling for diodes, bipolar junction transistors, and metal-oxide-semiconductor transistors; operation region and biasing; basic switching circuits; single-stage and multi-stage amplifier design and analysis; input and output impedance characteristics of amplifiers; frequency response; AC and DC coupling techniques; differential amplifiers and output stages. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: Biomedical Engineering 311 or Electrical Engineering 411 with a grade of at least C-; credit with a grade of at least C- or registration for Biomedical Engineering 343 or Electrical Engineering 313; and credit with a grade of at least C- or registration for one of the following: Aerospace Engineering 333T, Biomedical Engineering 333T, Chemical Engineering 333T, Civil Engineering 333T, Electrical Engineering 333T, Mechanical Engineering 333T, or Petroleum and Geosystems Engineering 333T.

#### E E 438K. Analog Electronics.

Analysis and design of analog electronic circuits; transistor models; single-ended amplifiers; differential amplifiers; operational amplifiers; frequency response; feedback theory; stability analysis; circuit nonidealities; op-amp-based circuits; output stages; power amplifiers; passive and active analog filters; and relaxation oscillators. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: Electrical Engineering 438 with a grade of at least C-.

#### E E 338L. Analog Integrated Circuit Design.

Analysis and design of analog integrated circuits; transistor models; simple and advanced current mirrors; single-ended amplifiers; differential amplifiers; operational amplifiers; frequency response; feedback theory; stability analysis; circuit nonidealities and noise; output stages; analog filters. CAD tools for circuit analysis and design. Three lecture hours a week for one semester. Prerequisite: Electrical Engineering 438 with a grade of at least C-.

#### E E 339. Solid-State Electronic Devices.

Semiconductor materials; atomic orbitals to energy band structure of semiconductors; charge carrier transport, electron-hole generation and recombination; p-n junctions and Schottky barriers; bipolar and fieldeffect transistors; and introduction to optoelectronic devices. Three lecture hours a week for one semester. Prerequisite: Mathematics 427J or 427K, Physics 303L, and 103N with a grade of at least C- in each.

#### E E 339S. Solar Energy Conversion Devices.

An investigation of basic principles of photovoltaic devices which convert light into charge carriers (electrons and holes). Topics include electrons and holes in semiconductors, generation and recombination, junctions, analysis of the p-n junction, silicon and III-V semiconductor solar cell design and optimization, thin film solar cell technologies, managing light, strategies for higher efficiency, and a brief overview of non-photovoltaic approaches to solar energy conversion. Three lecture hours a week for one semester. Electrical Engineering 339S and 379K (Topic 4: Solar Energy Conversion Devices) may not both be counted. Prerequisite: Mathematics 427J or 427K, Physics 303L and 103N with a grade of at least C- in each.

#### E E 440. Integrated Circuit Nanomanufacturing Techniques.

Integrated circuit processing; crystal growth and wafer preparation; epitaxial growth; oxidation, diffusion, and ion implantation; thin-film deposition techniques; and lithography and etching. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: Electrical Engineering 339 with a grade of at least C-; and credit with a grade of at least C- or registration for Aerospace Engineering 333T, Biomedical Engineering 333T, Chemical Engineering 333T, Civil Engineering 333T, Electrical Engineering 333T, Mechanical Engineering 333T, or Petroleum and Geosystems Engineering 333T.

#### E E 340P. High-Throughput Nanopatterning.

Sub-50nm fabrication using mechanical patterning techniques; overview of photolithography, mechanical nanopatterning processes, hot embossing, and UV imprint lithography; wafer-scale and roll-toroll nanopatterning with applications in electronics, photonics, and nanomedicine; physics of nanoreplication, process limits, template (mold) fabrication, defect mechanisms, and factors affecting throughput. Three lecture hours a week for one semester. Only one of the following may be counted: Electrical Engineering 340P, 379K (Topic: High-Throughput Nanopatterning), and Mechanical Engineering 379M (Topic: High-Throughput Nanopatterning). Prerequisite: Electrical Engineering 411 and 339, and Mathematics 427K or 429J, with a grade of at least Cin each.

#### E E 341. Electric Drives and Machines.

Fundamentals of electric machines. Electromechanical energy conversion; magnetic circuits, transformers, and energy conversion devices; and an introduction to power electronics. Motor drive fundamentals and applications. Three lecture hours a week for one semester. Prerequisite: Electrical Engineering 313 with a grade of at least C-.

#### E E 445L. Embedded Systems Design Laboratory.

Design of microcontroller-based embedded systems; interfacing from both a hardware and software perspective; and applications, including audio, data acquisition, and communication systems. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: Electrical Engineering 312 or 312H and 319K with a grade of at least Cin each; Electrical Engineering 411 and 313, or Biomedical Engineering 311 and 343, with a grade of at least C- in each; and credit with a grade of at least C- or registration for Aerospace Engineering 333T, Biomedical Engineering 333T, Chemical Engineering 333T, Civil Engineering 333T, Electrical Engineering 333T, Mechanical Engineering 333T, or Petroleum and Geosystems Engineering 333T.

#### E E 445M. Embedded and Real-Time Systems Laboratory.

Real-time operating systems; implementation of context switching, threads, multitasking, real-time scheduling, synchronization, communication, storage, file systems, memory management, process linking and loading, hardware interfacing, and networking; debugging and testing; operating system performance, including latency, jitter, deadlines, deadlocks, and starvation; real-time systems, including data acquisition, sensing, actuating, digital control, signal processing, and robotics. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: Electrical Engineering 445L (or 345L) or 445S (or 345S) with a grade of at least C-; and credit with a grade of at least C- or registration for Aerospace Engineering 333T, Biomedical Engineering 333T, Chemical Engineering 333T, Civil Engineering 333T, Electrical Engineering 333T, Mechanical Engineering 333T, or Petroleum and Geosystems Engineering 333T.

#### E E 445S. Real-Time Digital Signal Processing Laboratory.

Architectures of programmable digital signal processors; programming for real-time performance; design and implementation of digital filters, modulators, data scramblers, pulse shapers, and modems in real time; and interfaces to telecommunication systems. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: Electrical Engineering 312 or 312H and 319K with a grade of at least C- in each; Biomedical Engineering 343 or Electrical Engineering 313 with a grade of at least C-; credit with a grade of at least C- or registration for Aerospace Engineering 333T, Biomedical Engineering 333T, Chemical Engineering 333T, Civil Engineering 333T, Electrical Engineering 333T, Mechanical Engineering 333T, or Petroleum and Geosystems Engineering 333T; and credit with a grade of at least C- or registration for Biomedical Engineering 335 or Electrical Engineering 351K.

#### E E 347. Modern Optics.

Modern optical wave phenomena with applications to imaging, holography, fiber optics, lasers, and optical information processing. Three lecture hours a week for one semester. Prerequisite: Electrical Engineering 313 and 325 with a grade of at least C- in each, or Biomedical Engineering 343 with a grade of at least C-.

#### E E 348. Laser and Optical Engineering.

Principles of operation and applications of lasers, optical modulators, and optical detectors. Three lecture hours a week for one semester. Prerequisite: Electrical Engineering 339 with a grade of at least C-.

#### E E 351K. Probability and Random Processes.

Probability, random variables, statistics, and random processes, including counting, independence, conditioning, expectation, density functions, distributions, law of large numbers, central limit theorem, confidence intervals, hypothesis testing, statistical estimation, stationary processes, Markov chains, and ergodicity. Three lecture hours a week for one semester. Prerequisite: Mathematics 427J or 427K with a grade of at least C-.

#### E E 351M. Digital Signal Processing.

Sampling, aliasing, truncation effects; discrete and fast Fourier transform methods; convolution and deconvolution; finite and infinite impulse response filter design methods; Wiener, Kalman, noncausal, linear phase, median, and prediction filters; and spectral estimation. Three lecture hours a week for one semester. Prerequisite: Biomedical Engineering 343 or Electrical Engineering 313 with a grade of at least a C-, and credit with a grade of at least C- or registration for Biomedical Engineering 335 or Electrical Engineering 351K.

#### E E 155. Electrical and Computer Engineering Seminar.

Presentations by speakers from industry, government, academia, and professional private practice. Topics include environmental and other ethical concerns, safety awareness, quality management, technical career descriptions, and professionalism. Substantial practice in engineering communication. One lecture hour a week for one semester. Electrical Engineering 155 and 364D may not both be counted. Prerequisite: One of the following with a grade of at least C-: English 316L (or 316K), 316M (or 316K), 316N (or 316K), or 316P (or 316K).

#### E E 155L. Engineering Leadership Seminar.

Presentations by speakers from industry, government, academia, and professional private practice. Topics include environmental and other ethical concerns, safety awareness, quality management, technical career descriptions, and professionalism. One lecture hour a week for one semester. Prerequisite: Consent of the dean and one of the following with a grade of at least C-: English 316L (or 316K), 316M (or 316K), 316N (or 316K), or 316P (or 316K).

#### E E 155R. Undergraduate Research Seminar.

Restricted to students in electrical and computer engineering. Seminar on topics of research in electrical and computer engineering. One lecture hour a week for a semester. Offered on the pass/fail basis only.

## E E 160, 260, 360, 460. Special Problems in Electrical and Computer Engineering.

Restricted to engineering majors. Original investigation of special problems as approved by the electrical engineering department. For each semester hour of credit earned, the equivalent of three laboratory hours a week for one semester. May be repeated for credit. Prerequisite: Electrical Engineering 312 or 313 with a grade of at least C- and consent of instructor.

#### E E 360C. Algorithms.

Advanced problem solving methods; algorithm design principles; complexity analysis; study of the nature, impact, and handling of intractability; study of common algorithmic classes and their applications. Three lecture hours a week for one semester. Prerequisite: Computer Science 312 or Electrical Engineering 312 or 312H with a grade of at least C-; and Computer Science 313K or Mathematics 325K with a grade of at least C-.

#### E E 360F. Introduction to Software Engineering.

Introduction to the discipline of software engineering. Includes software system creation and evolution; fundamental concepts and principles of software product and software process systems, including requirements, architecture and design, construction, deployment, and maintenance; and documentation and document management, measurement and evaluation, software evolution, teamwork, and project management. Three lecture hours a week for one semester. Prerequisite: One of the following with a grade of at least C-: Computer Science 314 or 314H, or Electrical Engineering 422C.

#### E E 460J. Data Science Laboratory.

Predictive modeling, regression and classification, data cleaning and preprocessing, feature engineering, unsupervised methods, principal component analysis, data clustering, model selection and feature selection, entropy and information theory, neural networks, deep learning, machine learning for signals and time-series data. Three lecture hours and three laboratory hours a week for one semester. Only one of the following may be counted: Electrical Engineering 460J, 379K (Topic: Data Science Laboratory) or 379K (Topic 24). Prerequisite: The following with a grade of at least C- in each: Computer Science 314 or 314H, or Electrical Engineering 360C; Biomedical Engineering 343 or Electrical Engineering 313; and Biomedical Engineering 335 or Electrical Engineering 351K or Mathematics 362K; Mathematics 340L. Credit with a grade of at least C- or registration for Aerospace Engineering 333T, Biomedical Engineering 333T, Chemical Engineering 333T, Civil Engineering 333T, Electrical Engineering 333T, Mechanical Engineering 333T, or Petroleum and Geosystems Engineering 333T.

#### E E 360K. Introduction to Digital Communications.

Communication channels and their impairments; modulation; demodulation; probability-of-error analysis; source coding; error control coding; link budget analysis; equalization; synchronization and multiple access; spread spectrum; applications in wireline and wireless communication systems. Three lecture hours a week for one semester. Prerequisite: Biomedical Engineering 335 or Electrical Engineering 351K with a grade of at least C-, and Biomedical Engineering 343 or Electrical Engineering 313 with a grade of at least C-.

#### E E 460M. Digital Systems Design Using HDL.

Organization, design, simulation, synthesis, and testing of digital systems; hardware description languages (HDLs); field programmable gate arrays (FPGAs); hardware implementation of arithmetic and other algorithmic processes; state machine charts; microprogramming; and microprocessor design. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: Electrical Engineering 312 or 312H, 316, and 319K with a grade of at least C- in each.

#### E E 460N. Computer Architecture.

Characteristics of instruction set architecture and microarchitecture; physical and virtual memory; caches and cache design; interrupts and exceptions; integer and floating-point arithmetic; I/O processing; buses; pipelining, out-of-order execution, branch prediction, and other performance enhancements; design trade-offs; case studies of commercial microprocessors. Laboratory work includes completing the behavioral-level design of a microarchitecture. Three lecture hours and one and one-half laboratory/recitation hours a week for one semester. Prerequisite: Computer Science 312 or 312H, and 429 or 429H with a grade of at least C- in each; or Electrical Engineering 306, 312 or 312H, and 319K with a grade of at least C- in each.

#### E E 360P. Concurrent and Distributed Systems.

An investigation of concurrency, lock-based and lock-free synchronization, resource allocation, multi-threaded programming, distributed systems programming, mutual exclusion, global snapshots, global property evaluation, message ordering, consensus, Byzantine agreement, commit protocols. Three lecture hours a week for one semester. Prerequisite: Electrical Engineering 422C (or 322) with a grade of at least C-.

#### E E 460R. Introduction to VLSI Design.

Theory and practice of very-large-scale integration (VLSI) circuit design. Metal-oxide-semiconductor (MOS) transistors; static and dynamic complementary metal-oxide-semiconductor (CMOS) combinational and sequential circuits; design of adders, multipliers, and shifters; performance, power consumption and testing. CAD tools for layout, timing analysis, synthesis, physical design, and verification. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: Electrical Engineering 316 and 438 with a grade of at least C- in each.

#### E E 360S. Digital Integrated Circuit Design.

Circuit-level aspects of metal oxide silicon (MOS) and bipolar integrated circuit technologies. Logic gates and latches; propagation delays; circuit simulation models. Three lecture hours a week for one semester. Prerequisite: Electrical Engineering 438 and 339 with a grade of at least C- in each.

#### E E 360T. Software Testing.

Basic concepts and techniques used in testing software and finding bugs. Includes process, unit, integration, and system testing; manual and automatic techniques for generation of test inputs and validation of test outputs; and coverage criteria. Focus on functional testing. Three lecture hours a week for one semester. Electrical Engineering 360T and 379K (Topic: Software Testing) may not both be counted. Prerequisite: One of the following with a grade of at least C-: Computer Science 314 or 314H, or Electrical Engineering 422C.

#### E E 361C. Multicore Computing.

Theoretical and practical aspects of designing multicore software systems; programming constructs for concurrent computation; openMP; sequential consistency; linearizability; lock-based synchronization; lock-free synchronization; wait-free synchronization; consensus number; software transactional memory; testing and debugging parallel programs; race detection; concurrent data structures such as stacks, queues, linked lists, hash tables, and skiplists; formal models; temporal logic; reachability analysis; and parallel graph algorithms. Three lecture hours a week for one semester. Electrical Engineering 361C and 379K (Topic: Multicore Computing) may not both be counted. Prerequisite: Electrical Engineering 422C with a grade of at least C-.

#### E E 361D. System Design Metrics.

Survey of engineering design, manufacturing, and lifetime support issues; implications of customer perceptions of quality on design; economics of design; legal implications of design decisions. The equivalent of three lecture hours a week for one semester. Prerequisite: Electrical Engineering 364D with a grade of at least C-.

#### E E 461L. Software Engineering and Design Laboratory.

The design and development of large-scale software systems using automated analysis tools. Generation of concrete software engineering artifacts at all stages of the software life-cycle. Design principles and methods; design and modeling tools; collaborative development environment; object-oriented design and analysis; design patterns and refactoring; integration and testing tools; debugger and bug finder; program comprehension; software life-cycle and evolution. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: Computer Science 314, 314H, or Electrical Engineering 422C with a grade of at least C-; Mathematics 325K with a grade of at least C-; and credit or registration with a grade of at least C- for Aerospace Engineering 333T, Biomedical Engineering 333T, Chemical Engineering 333T, Civil Engineering 333T, Electrical Engineering 333T, Mechanical Engineering 333T, or Petroleum and Geosystems Engineering 333T.

#### E E 461P. Data Science Principles.

Principles of unsupervised and supervised learning; exploratory data analysis; feature engineering; predictive modeling for regression and classification; clustering algorithms; neural networks and stochastic gradient descent methods; scalable models for Big Data sets; case studies; programming predictive models in Python and R. Four lecture hours a week for one semester. Only one of following may be counted: Electrical Engineering 379K (Topic: Introduction to Data Mining), 361M, and 461P. Prerequisite: The following with a grade of at least C- in each: Mathematics 340L, and Computer Science 314 or 314H, or Electrical Engineering 360C, and Biomedical Engineering 343 or Electrical Engineering 313, and Biomedical Engineering 335 or Electrical Engineering 351K or Mathematics 362K.

#### E E 361Q. Requirements Engineering.

Methods and technology for acquiring, representing, documenting, verifying, validating, and maintaining requirements; text-based, graphicbased, and computational requirements model representations; requirements analysis to synthesize and resolve conflicts among disparate stakeholder viewpoints; requirements traceability and evolution, and change management. The equivalent of three lecture hours a week for one semester. Electrical Engineering 361Q and 379K (Topic: Requirements Engineering) may not both be counted. Prerequisite: Computer Science 312 or 312H, or Electrical Engineering 312 or 312H with a grade of at least C-.

#### E E 361R. Radio-Frequency Electronics.

Modeling of active and passive devices and transmission line structures at high frequencies. Analysis and design of radio-frequency electronic circuits including amplifiers, mixers, multipliers, detectors, and oscillators; transistor-, circuit-, and system-level design methods, challenges, and topologies; noise and distortion analysis; and evaluation of modern radio systems. The equivalent of three lecture hours a week for one semester. Electrical Engineering 361R and 379K (Topic: Radio Frequency Circuit Design) may not both be counted. Prerequisite: Electrical Engineering 325 and 438 with a grade of at least C- in each.

#### E E 461S. Operating Systems.

Introductory course on operating system design and implementation; the shell; process management and system calls; memory management; thread management, scheduling, synchronization and concurrency; file systems; input/output systems; virtual machines; networking and security. Three lecture hours and one lab hour a week for one semester. Electrical Engineering 461S and 379K (Topic: Operating Systems) may not both be counted. Prerequisite: The following with a grade of at least C-: Electrical Engineering 312, 319K, and Mathematics 325K.

#### E E 362G. Smart Grids.

Fundamentals of smart electric power grids; smart grid architecture, communications, measurement, sensing, design, performance, standards and cyber security; distributed energy, renewable sources, and energy storage; interoperability. Three lecture hours a week for one semester. Electrical Engineering 362G and 379K (Topic: Smart Grids) may not both be counted. Prerequisite: Electrical Engineering 368L or 369 with a grade of at least C-.

#### E E 362K. Introduction to Automatic Control.

Restricted to engineering majors. Analysis of linear automatic control systems in time and frequency domains; stability analysis; state variable analysis of continuous-time and discrete-time systems; root locus; Nyquist diagrams; Bode plots; sensitivity; lead and lag compensation. Three lecture hours a week for one semester. Prerequisite: Electrical Engineering 313 and Mathematics 340L with a grade of at least C- in each.

#### E E 462L. Power Electronics Laboratory.

Analysis, design, and operation of power electronic circuits; power conversion from AC to DC, DC to DC, and DC to AC; rectifiers, inverters, and pulse width modulated motor drives. Laboratory work focuses on the use of energy from renewable sources such as photovoltaics and wind. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: Electrical Engineering 313 with a grade of at least C-; and credit with a grade of at least C- or registration for one of the following: Aerospace Engineering 333T, Biomedical Engineering 333T, Chemical Engineering 333T, Civil Engineering 333T, Electrical Engineering 333T, Mechanical Engineering 333T, or Petroleum and Geosystems Engineering 333T.

#### E E 362Q. Power Quality and Harmonics.

Introduction to and analysis of power quality and harmonic phenomena in electric power systems. Includes characteristics and definitions, voltage sags, electrical transients, harmonics, mitigation techniques, and standards of power quality and harmonics. The equivalent of three lecture hours a week for one semester. Electrical Engineering 362Q and 379K (Topic: Power Quality and Harmonics) may not both be counted. Prerequisite: Electrical Engineering 313 with a grade of at least C-.

#### E E 362R. Renewable Energy and Power Systems.

Introduction to renewable energy sources and their integration into power systems. Includes wind energy: resources, turbines, blades, rotor power characteristics, generators, active and reactive power, variability, and voltage regulation; solar energy: resources, solar radiation measurements, photovoltaic materials and properties, photovoltaic electrical characteristics, and system integration; and demonstrations with commercial-grade solar panels and laboratory-scale wind turbines. Three lecture hours a week for one semester. Electrical Engineering 362R and 379K (Topic: Renewable Energy and Power Systems) may not both be counted. Prerequisite: Electrical Engineering 313 with a grade of at least C-.

#### E E 362S. Development of a Solar-Powered Vehicle.

Analysis, design, and construction of a solar-powered car for national competitions involving other universities. Study of electrical, mechanical, and aerodynamic systems. Three lecture hours and three laboratory hours a week for one semester. Electrical Engineering 362S and 379K (Topic: Development of a Solar Car for NASC) may not both be counted. Prerequisite: Electrical Engineering 312 or 313 with a grade of at least C-.

#### E E 363M. Microwave and Radio Frequency Engineering.

Design principles in microwave and radio frequency systems; transmission lines and waveguides; S-parameter representation; impedance matching; microwave network analysis; microwave devices and components; electromagnetic effects in high-speed/high-frequency applications. Three lecture hours a week for one semester. Prerequisite: Electrical Engineering 325 with a grade of at least C-.

#### E E 363N. Engineering Acoustics.

Same as Mechanical Engineering 379N. Principles of acoustics, with applications drawn from audio engineering, biomedical ultrasound, industrial acoustics, noise control, room acoustics, and underwater

sound. Three lecture hours a week for one semester. Prerequisite: Mathematics 427J or 427K with a grade of at least C-.

#### E E 464C. Corporate Senior Design Project.

Design and experimental projects, done in the laboratories of local companies, for electrical engineering students working full-time in industry; the ethics of design for safety and reliability; emphasis on written and oral reporting of engineering projects. Three lecture hours a week for one semester, with additional laboratory hours to be arranged. Prerequisite: Electrical Engineering 364D with a grade of at least C-; and Electrical Engineering 440, 445L (or 345L), 445S (or 345S), 461L, or 462L (or 362L) with a grade of at least C-.

#### E E 364D. Introduction to Engineering Design.

Introduction to the engineering design process; assessing engineering problems and customer needs; acquiring, documenting, and verifying requirements; high-level system design principles; effects of economic, environmental, ethical, safety, and social issues in design; writing design specifications. Two lecture hours and three laboratory hours a week for one semester. Electrical Engineering 155 and 364D may not both be counted. Prerequisite: Aerospace Engineering 333T, Biomedical Engineering 333T, Chemical Engineering 333T, Civil Engineering 333T, Electrical Engineering 333T, Mechanical Engineering 333T, or Petroleum and Geosystems Engineering 333T, with a grade of at least C-; and credit with a grade of at least C- or registration for Electrical Engineering 438, 440, 445L, 445S, 460J, 461L, 462L, or 471C.

#### E E 364E. Interdisciplinary Entrepreneurship.

First course in a two-semester sequence that concludes with Electrical Engineering 464S. Teams of students starting companies focus on skill development and mentoring in start-up formation, technology development, market validation, marketing, sales, operations, human resources, program management, and finance. Includes discussion of the role of intellectual property, the social issues in design, as well as ethical and safety considerations. Emphasis on written and oral presentation of start-up activities. The equivalent of three lecture hours a week for one semester, with additional hours to be arranged. Electrical Engineering 364E and 464S may not be counted by students with credit for Electrical Engineering 364D, 464H, 464K, or 464R. Prerequisite: Credit with a grade of at least C- in Aerospace Engineering 333T, Biomedical Engineering 333T, Chemical Engineering 333T, Civil Engineering 333T, Electrical Engineering 333T, Mechanical Engineering 333T, or Petroleum and Geosystems Engineering 333T; credit with a grade of at least C- or registration for Electrical Engineering 438, 440, 445L, 445S, 460J, 461L, 462L, or 471C; and consent of instructor

#### E E 464G. Multidisciplinary Senior Design Project.

Design and experimental projects done with teams of students from multiple engineering disciplines; the ethics of design for safety and reliability; emphasis on written and oral reporting of engineering projects. Three lecture hours a week for one semester, with additional laboratory hours to be arranged. Prerequisite: Electrical Engineering 364D with a grade of at least C-; and Electrical Engineering 440, 445L (or 345L), 445S (or 345S), 461L, or 462L (or 362L) with a grade of at least C-.

#### E E 464H. Honors Senior Design Project.

Restricted to students in the Engineering Honors Program. Design and experimental projects done under the direction of a University faculty member; the ethics of design for safety and reliability; emphasis on written and oral reporting of engineering projects. Three lecture hours and six laboratory hours a week for one semester. Prerequisite: Electrical Engineering 364D with a grade of at least C-, and one of the following with a grade of at least C-: Electrical Engineering 438, 440, 445L, 445S, 460J, 461L, 462L, 471C.

#### E E 464K. Senior Design Project.

Design and experimental projects done in Department of Electrical and Computer Engineering laboratories; the ethics of design for safety and reliability; emphasis on written and oral reporting of engineering projects. Three lecture hours and six laboratory hours a week for one semester. Prerequisite: Electrical Engineering 364D with a grade of at least C-, and one of the following with a grade of at least C-: Electrical Engineering 438, 440, 445L, 445S, 460J, 461L, 462L, 471C.

#### E E 464R. Research Senior Design Project.

Design and experimental projects done under the supervision of a University faculty member; the ethics of design for safety and reliability; emphasis on written and oral reporting of engineering projects. Three lecture hours and six laboratory hours a week for one semester. Prerequisite: Electrical Engineering 364D with a grade of at least C-, and one of the following with a grade of at least C-: Electrical Engineering 438, 440, 445L, 445S, 460J, 461L, 462L, 471C.

#### E E 464S. Start-Up Senior Design Project.

Continuation of Electrical Engineering 364E. Completion of a practical engineering product design; validation of the design through prototype construction and testing, modeling and simulation, and manufacturability analysis. Development of a completed company prospectus, seeking venture funding for the project. Three lecture hours and six laboratory hours a week for one semester. Electrical Engineering 364E and 464S may not be counted by students with credit for 364D, 464H, 464K, or 464R. Prerequisite: Electrical Engineering 364E with a grade of at least C-; one of the following courses with a grade of at least C-: Electrical Engineering 438, 440, 445L, 445S, 460J, 461L, 462L, 471C; and consent of instructor.

#### E E 366. Engineering Economics I.

Business organization; discounted cash flow calculations, including present-worth and rate-of-return calculations; replacement analyses; financial analyses; accounting and depreciation; income taxes; inflation; risk analysis, utility theory, decision models, sequential decision making; value of information. Three lecture hours a week for one semester. Prerequisite: The following with a grade of at least C-: Biomedical Engineering 335 or Electrical Engineering 351K, and Biomedical Engineering 343 or Electrical Engineering 313.

#### E E 366K. Engineering Economics II.

Fundamentals of risk management, including portfolio theory, capital asset pricing theory, and optimal project mix; hedging financial risk; advanced economic analysis of alternative energy systems; and advanced mathematical modeling techniques for economic analysis. Three lecture hours a week for one semester. Prerequisite: Electrical Engineering 366 with a grade of at least C-.

#### E E 366L. Statistics for Manufacturing.

Statistical analysis applied to the development and control of manufacturing operations; quality control, statistical process control, and design of experiments. Three lecture hours a week for one semester. Prerequisite: The following with a grade of at least C-: Biomedical Engineering 335 or Electrical Engineering 351K, and Biomedical Engineering 343 or Electrical Engineering 313.

#### E E 368L. Power Systems Apparatus and Laboratory.

Fundamentals of power systems emphasized through laboratory experiments; complex power, three-phase circuits, per-unit system, transformers, synchronous machines, transmission line models, steadystate analysis, induction machines, capacitor banks, protective relaying, surge arrestors, and instrumentation. Three lecture hours and three laboratory hours a week for one semester. Electrical Engineering 368L and 379K (Topic: Power Systems Apparatus and Laboratory) may not both be counted. Prerequisite: Electrical Engineering 313 with a grade of at least C-; and credit with a grade of at least C- or registration for Aerospace Engineering 333T, Biomedical Engineering 333T, Chemical Engineering 333T, Civil Engineering 333T, Electrical Engineering 333T, Mechanical Engineering 333T, or Petroleum and Geosystems Engineering 333T.

#### E E 369. Power Systems Engineering.

Introduction to power systems engineering. Subjects include complex power, phasors, balanced three phase power systems, transformers and per-unit systems, transmission line parameters, steady state operation of transmission lines, the power flow problem, symmetrical faults, power system controls, economic operation of power systems, optimal power flow, and deregulation and restructuring of electricity markets. Three lecture hours a week for one semester. Prerequisite: Electrical Engineering 313 with a grade of at least C-.

#### E E 369L. Relay Protection of Power Systems.

Theory, principles, and practices for protecting medium-voltage industrial power systems and high-voltage transmission grids. Includes symmetrical components; fault calculations and grounding; protection of motors, generators, cables, and transmission lines; and relay settings, fusing, and coordination of multiple protection devices. Two lecture hours and three laboratory hours a week for one semester. Prerequisite: Electrical Engineering 313 with a grade of at least C-.

#### E E 370. Automatic Control II.

Introduction to modern control theory, nonlinear and optimal control systems; controllability, observability, stability; state feedback, observers, eigenvalue assignment. Three lecture hours a week for one semester. Prerequisite: Credit with a grade of at least C- or registration for Electrical Engineering 362K.

#### E E 370K. Computer Control Systems.

Analysis and design of linear discrete time control systems; z-transform theory; modified z-transforms; stability; multirate systems; digital simulation of discrete time systems; synthesis of algorithms for computer controllers. Three lecture hours a week for one semester. Prerequisite: Credit with a grade of at least C- or registration for Electrical Engineering 362K.

## E E 370L. Introduction to Manufacturing Systems Automation.

Applications of automation techniques to manufacturing systems; robotics and computer vision. Three lecture hours a week for one semester. Prerequisite: Electrical Engineering 362K with a grade of at least C-.

#### E E 370N. Introduction to Robotics and Mechatronics.

Structures for industrial robots; geometry and transformation; direct and inverse kinematics; differential kinematics; dynamics; trajectory planning; actuators and sensors; adaptive control and learning compliance; vision and pattern recognition; expert systems. Three lecture hours a week for one semester. Prerequisite: Electrical Engineering 362K with a grade of at least C-.

#### E E 471C. Wireless Communications Laboratory.

The fundamentals of wireless communication from a digital signal processing perspective; linear modulation, demodulation, and orthogonal frequency division multiplexing; synchronization, channel estimation, and equalization; communication in fading channels; and wireless standards. Three lecture hours and three laboratory hours a week for one semester. Electrical Engineering 371C and 379K (Topic: Wireless Communications Laboratory) may not both be counted. Prerequisite: Electrical Engineering 445S (or 345S), 351M, or 360K with a grade of at least C-; and credit with a grade of at least C- or registration for Aerospace Engineering 333T, Biomedical Engineering 333T, Chemical Engineering 333T, Civil Engineering 333T, Electrical Engineering 333T, Mechanical Engineering 333T, or Petroleum and Geosystems Engineering 333T.

#### E E 371D. Introduction to Neural Networks.

Characteristics of artificial neural networks, feedforward networks, and recurrent networks; learning algorithms; self-organization; biological links; data mining and other applications. Three lecture hours a week for one semester. Prerequisite: The following with a grade of at least C- in each: Mathematics 340L, and Biomedical Engineering 343 or Electrical Engineering 313, and Biomedical Engineering 335 or Electrical Engineering 351K or Mathematics 362K.

#### E E 371M. Communication Systems.

Analog and digital modulation; noise in communication systems; signal-to-noise ratio; coding; optimal receiver design; phase-locked loops; and performance analysis. Three lecture hours a week for one semester. Prerequisite: The following with a grade of at least C- in each: Mathematics 340L, and Biomedical Engineering 343 or Electrical Engineering 313, and Biomedical Engineering 335 or Electrical Engineering 351K or Mathematics 362K.

#### E E 371R. Digital Image and Video Processing.

Digital image acquisition, processing, and analysis; algebraic and geometric image transformations; two-dimensional Fourier analysis; image filtering and coding. Three lecture hours a week for one semester. Prerequisite: The following with a grade of at least C- in each: Biomedical Engineering 343 or Electrical Engineering 313, and Biomedical Engineering 335 or Electrical Engineering 351K or Mathematics 362K.

#### E E 372L. Network Engineering Laboratory.

Local, metropolitan, and wide-area operations; telecommunication common carrier organization and services: administrative and political considerations; premise distribution systems; name resolution, address assignment, and mail; datagrams, packets, frames, and cells; addressing and network-level interconnection; internetwork architecture; TCP/IP protocol suite (v. 4 and 6); Ethernet and IEEE 802.3 standards; IEEE 802.11 standards and wireless access points; repeaters, hubs, bridges, routers; local area network emulation; public switched network access through POTS and ISDN; intradomain and interdomain routing; routing protocols, including RIP, OSPF, and BGP; multicast; media testing; localand wide-area diagnostic tools. The equivalent of three lecture hours a week for one semester. Prerequisite: Electrical Engineering 372N with a grade of at least C-; and credit with a grade of at least C- or registration for Aerospace Engineering 333T, Biomedical Engineering 333T, Chemical Engineering 333T, Civil Engineering 333T, Electrical Engineering 333T, Mechanical Engineering 333T, or Petroleum and Geosystems Engineering 333T

#### E E 372N. Telecommunication Networks.

Circuit and packet-switched networks; local area networks; protocol stacks; ATM and broadband ISDN; Internet; routing, congestion control, and performance evaluation; multimedia applications. Three lecture hours a week for one semester. Prerequisite: The following with a grade of at least C- in each: Mathematics 340L, and Biomedical Engineering 343 or Electrical Engineering 313, and Biomedical Engineering 335 or Electrical Engineering 351K or Mathematics 362K.

#### E E 372S. Cryptography and Network Security.

Distributed information system security; cryptographic tools; authentication; message security; system management. The

equivalent of three lecture hours a week for one semester. Prerequisite: Mathematics 325K or 340L with a grade of at least C-.

#### E E 374K. Biomedical Electronic Instrument Design.

Application of electrical engineering principles in the design of electronic instrumentation at the circuit-board level for the measurement of pressure, temperature, flow, and impedance. Also includes the study of light intensity, bioelectric potentials, and stimulation devices such as pacemakers and defibrillators. Focus on design considerations specific to electro-medical environments, safety and efficacy, and public policy issues. Three lecture hours a week for one semester. Prerequisite: Electrical Engineering 438 with a grade of at least C-.

#### E E 374L. Applications of Biomedical Engineering.

An in-depth examination of selected topics in biomedical engineering, such as optical and thermal properties of laser interaction with tissue; measurement of perfusion in the microvascular system; diagnostic imaging; interaction of living systems with electromagnetic fields; robotic surgical tools; ophthalmic instrumentation; noninvasive cardiovascular measurements. Three lecture hours and six laboratory hours a week for one semester. Prerequisite: Electrical Engineering 374K with a grade of at least C-; and credit with a grade of at least C- or registration for Aerospace Engineering 333T, Biomedical Engineering 333T, Chemical Engineering 333T, Civil Engineering 333T, electrical Engineering 333T, Mechanical Engineering 333T, or Petroleum and Geosystems Engineering 333T.

#### E E 377E. Interdisciplinary Entrepreneurship: Elective.

Restricted to engineering students. Projects must differ significantly from those developed for Electrical Engineering 364D and 364E. Focus on skill development and mentoring in start-up formation, technology development, market validation, marketing, sales, operations, human resources, program management, and finance. Includes discussion of intellectual property, social issues in design, as well as ethical and safety considerations. Emphasis on written and oral presentation of start-up activities. The equivalent of three lecture hours a week for one semester. Only one of the following may be counted: Computer Science 374L, 378 (Topic: Longhorn Startup), Electrical Engineering 377E, Engineering Studies 377E, Management 337 (Topic: Interdisciplinary Entrepreneurship), 337 (Topic 2). Prerequisite: Consent of instructor.

#### E E 679H. Undergraduate Honors Thesis.

Research performed during two consecutive semesters under the supervision of an engineering faculty member; topics are selected jointly by the student and the faculty member with approval by the director of the Engineering Honors Program. The student makes an oral presentation and writes a thesis. Individual instruction for two semesters. Students pursuing both the Bachelor of Arts, Plan II, and a bachelor's degree in engineering may use this course to fulfill the thesis requirement for the Bachelor of Arts, Plan II. Prerequisite: For 679HA, enrollment in the Engineering Honors Program; for 679HB, Electrical Engineering 679HA with a grade of at least C- and enrollment in the Engineering Honors Program.

#### E E 179K, 279K, 379K, 479K. Topics in Electrical Engineering.

For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing, Electrical Engineering 312 or 313 with a grade of at least C-, and consent of instructor.

#### Topic 1: Conference Course.

**Topic 15: Information Theory.** Measures of information; noiseless coding and data compression; discrete memoryless channels and channel capacity; broadcast channels; error-correcting codes. Additional prerequisite: The following with a grade of at least C-

in each: Mathematics 340L, and Biomedical Engineering 343 or Electrical Engineering 313, and Biomedical Engineering 335, Electrical Engineering 351K, or Mathematics 362K.

#### Topic 20: Computer Architecture: Personal Computer Design.

Commercial general purpose processors, memory architecture, buses, storage devices, graphics subsystems, I/O devices and peripherals, audio subsystems, operating systems, benchmarking, manufacturing, and testing of personal computer systems. One class meeting may take place outside of normally scheduled class time for a tour of a PC manufacturing site. Additional prerequisite: Electrical Engineering 460N (or 360N) with a grade of at least C-.

**Topic 21: Information and Cryptography.** Information theory; construction of codes; cryptography, including security and randomized encryption; Kolmogorov complexity; statistics, including large deviations, nonparametrics, and information inequalities; Vapnik-Cervonenkis methods for learning theory. Additional prerequisite: The following with a grade of at least C- in each: Mathematics 340L, and Biomedical Engineering 343 or Electrical Engineering 313, and Biomedical Engineering 335, Electrical Engineering 351K, or Mathematics 362K.

**Topic 23: Software Evolution.** Software design principles; program differencing techniques; program transformation languages and tools; analysis, testing, debugging and visualization methods for evolving software. Electrical Engineering 379K (Topic: Software Evolution) and 379K (Topic 23) may not both be counted. Additional prerequisite: Electrical Engineering 461L with a grade of at least C-, or an equivalent computer science course with a grade of at least C-.

## Department of Mechanical Engineering

## Mechanical Engineering: M E

#### **Lower-Division Courses**

#### M E 302. Introduction to Engineering Design and Graphics.

Introduction to mechanical engineering education and practice through lectures and laboratory experiences. Graphics and modeling fundamentals for engineering design: freehand sketching, computer modeling of solid geometry, and generation of engineering drawings. Introduction to reverse engineering, computer-aided design, rapid prototyping, and manufacturing. Application of the design process and problem solving through individual and team projects. Two lecture hours and four laboratory hours a week for one semester. Only one of the following may be counted: Mechanical Engineering 302, 210, 210H. Prerequisite: Credit or registration for Mathematics 408C or 408K.

#### M E 103. Studies in Engineering Design Graphics.

Computer laboratory work in engineering design graphics for students with transfer credit for Mechanical Engineering 210 who need additional work. Three computer laboratory hours a week for one semester. May not be counted by students with credit for Mechanical Engineering 302, 210, or 210H. Prerequisite: Consent of the undergraduate adviser.

#### M E 205. Introduction to Computers and Programming.

Introduction to computer hardware and software systems; programming using a high-level language; mathematical software programming; and introduction to machine language. Includes significant hands-on programming opportunities. One lecture hour and three laboratory hours a week for one semester. May not be taken concurrently with Mechanical Engineering 302. Prerequisite: Credit or registration for Mathematics 408C or 408K.

#### M E 210. Engineering Design Graphics.

Graphics and modeling fundamentals for engineering design: freehand sketching, computer modeling of solid geometry, and generation of engineering drawings. Introduction to reverse engineering, computeraided design, rapid prototyping, and manufacturing. Application of the design process to problem solving. Individual and team design projects. Two lecture hours and three laboratory hours a week for one semester. Only one of the following may be counted: Mechanical Engineering 302, 210, 210H. May not be counted toward the Bachelor of Science in Mechanical Engineering degree. Prerequisite: Credit or registration for Mathematics 408C or 408K.

#### M E 210H. Engineering Design Graphics: Honors.

Graphics and modeling fundamentals for engineering design: freehand sketching, computer modeling of solid geometry, and generation of engineering drawings. Introduction to reverse engineering, computeraided design, rapid prototyping, and manufacturing. Application of the design process to problem solving. Individual and team design projects. One lecture hour and four laboratory hours a week for one semester. Only one of the following may be counted: Mechanical Engineering 302, 210, 210H. May not be counted toward the Bachelor of Science in Mechanical Engineering degree. Prerequisite: Credit or registration for Mathematics 408C or 408K, and admission to an engineering honors program.

#### M E 310T. Applied Thermodynamics.

First and second laws of thermodynamics; thermodynamics processes, cycles, and heat transfer. Three lecture hours a week for one semester. Mechanical Engineering 320 and 310T may not both be counted. May not be counted toward the Bachelor of Science in Mechanical Engineering degree. Prerequisite: Chemistry 301, Mathematics 408D, and Physics 303K.

#### M E 311. Materials Engineering.

An exploration of fundamental aspects of the structure, properties, and behavior of engineering materials. Three lecture hours a week for one semester. Prerequisite: The following courses with a grade of at least C- in each: Chemistry 301, Mechanical Engineering 302, Physics 303K, 103M; and credit or registration for Mechanical Engineering 111L, Physics 303L, and 103N.

#### M E 111L. Materials Engineering Laboratory.

Hands-on experiments in materials science and engineering topics and microstructure-property relationships discussed in Mechanical Engineering 311. One lecture hour and three laboratory hours a week for one semester. Prerequisite: Mechanical Engineering 302 with a grade of at least C-, and credit or registration for Mechanical Engineering 311.

#### M E 314D. Dynamics.

Analysis of motions, forces, momenta, and energies in mechanical systems. Three lecture hours and one discussion hour a week for one semester. Mechanical Engineering 324 and 314D may not both be counted. Prerequisite: Engineering Mechanics 306 and Mathematics 408D with a grade of at least C- in each, and credit or registration for Mechanical Engineering 318M.

#### M E 316T. Thermodynamics.

Properties, heat and work, first and second laws, thermodynamic processes, introduction to ideal power cycles. Three lecture hours a week for one semester, with additional hours to be arranged. Only one of the following may be counted: Mechanical Engineering 326, 326H, 316T. Prerequisite: Chemistry 301, Mathematics 408D, and Physics 303K with a grade of at least C- in each.

#### M E 218. Engineering Computational Methods.

Applied numerical analysis, programming of computational algorithms using mathematical software, and applications of computational methods to the solution of mechanical engineering problems. One and one-half lecture hours and one and one-half laboratory hours a week for one semester. Prerequisite: Mathematics 427J or 427K and Mechanical Engineering 205 with a grade of at least C- in each.

## M E 318M. Programming and Engineering Computational Methods.

An investigation of applied numerical analysis, programming of computational algorithms using mathematical software, and applications of computational methods to the solution of mechanical engineering problems. Two lecture hours and one and one-half laboratory hours a week for one semester. Prerequisite: Mathematics 427J or 427K with a grade of at least C-.

#### M E 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Mechanical Engineering.

Used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Mechanical Engineering. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### **Upper-Division Courses**

#### M E 320. Applied Thermodynamics.

First and second laws of thermodynamics; thermodynamic processes, cycles, and heat transfer. Three lecture hours a week for one semester. Mechanical Engineering 320 and 310T may not both be counted. May not be counted toward the Bachelor of Science in Mechanical Engineering degree. Prerequisite: Chemistry 301, Mathematics 408D, and Physics 303K.

#### M E 324. Dynamics.

Analysis of motions, forces, momenta, and energies in mechanical systems. Three lecture hours and one discussion hour a week for one semester. Mechanical Engineering 314D and 324 may not both be counted. Prerequisite: Engineering Mechanics 306 and Mathematics 408D with a grade of at least C- in each; and credit or registration for Mechanical Engineering 318M.

#### M E 325L. Cooperative Engineering.

This course covers the work period of mechanical engineering students in the Cooperative Engineering Program. Forty laboratory hours a week for three semesters. Only one of the following may be counted: Mechanical Engineering 325L, 362K, 371K, 177K, 277K, 377K. The student must complete Mechanical Engineering 325LX, 325LY, and 325LZ before a grade and degree credit are awarded. May be repeated for credit. Prerequisite: For 325LX, application to become a member of the Cooperative Engineering Program, approval of the dean, and appointment for a full-time cooperative work tour; for 325LY, Mechanical Engineering 325LX and appointment for a full-time cooperative work tour; for 325LZ, Mechanical Engineering 325LY and appointment for a full-time cooperative work tour.

#### M E 225M. Cooperative Engineering.

This course covers the work period of mechanical engineering students in the Cooperative Engineering Program. Forty laboratory hours a week for two semesters. The student must complete Mechanical Engineering 225MA and 225MB before a grade and degree credit are awarded. Prerequisite: For 225MA, application to become a member of the Cooperative Engineering Program, approval of the dean, and appointment for a full-time cooperative work tour; for 225MB, Mechanical Engineering 225MA and appointment for a full-time cooperative work tour.

#### M E 125N. Cooperative Engineering.

This course covers the work period of mechanical engineering students in the Cooperative Engineering Program. Forty laboratory hours a week for one semester. May be repeated for credit. Prerequisite: Mechanical Engineering 325LZ or 225MB, application to become a member of the Cooperative Engineering Program, approval of the dean, and appointment for a full-time cooperative work tour.

#### M E 326. Thermodynamics.

Properties, heat and work, first and second laws, thermodynamic processes, introduction to ideal power cycles. Three lecture hours a week for one semester. For some sections, two discussion hours a week are also required. Only one of the following may be counted: Mechanical Engineering 326, 326H, 316T. Prerequisite: Chemistry 301, Mathematics 408D, and Physics 303K with a grade of at least C- in each.

#### M E 326H. Thermodynamics: Honors.

Properties, heat and work, first and second laws, thermodynamic processes, introduction to ideal power cycles. Three lecture hours a week for one semester. For some sections, two discussion hours a week are also required. Only one of the following may be counted: Mechanical Engineering 326, 326H, 316T. Prerequisite: Chemistry 301, Mathematics 408D, and Physics 303K with a grade of at least C- in each, and admission to an engineering honors program.

#### M E 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Mechanical Engineering.

Used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Mechanical Engineering. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### M E 330. Fluid Mechanics.

Fluid properties, statics, conservation laws, inviscid and viscous incompressible flow, flow in confined streams and around objects. Three lecture hours a week for one semester. Prerequisite: Engineering Mechanics 306, Mathematics 427J or 427K, and Mechanical Engineering 316T or 326 or 326H, with a grade of at least C- in each; and credit or registration for Mechanical Engineering 130L.

#### M E 130L. Experimental Fluid Mechanics.

Experimental design concepts, uncertainty analysis, and systems analysis as applied to thermodynamics, fluid mechanics, and heat transfer systems. One lecture hour and two laboratory hours a week for one semester. Prerequisite: Credit or registration for Mechanical Engineering 330.

#### M E 333H. Engineering Communication: Honors.

Professional communication skills for engineers, with emphasis on research, writing, editing, and oral presentation on topics of social and technical significance in engineering. Students collaborate to publish an online journal. Two lecture hours and two laboratory hours a week for one semester. Mechanical Engineering 333H and 333T may not both be counted. Prerequisite: Rhetoric and Writing 306 with a grade of at least C-, and admission to an engineering honors program.

#### M E 333T. Engineering Communication.

Professional communication skills for engineers, with emphasis on research, writing, and oral presentation on topics of social and technical significance in engineering. Two lecture hours and two laboratory hours a week for one semester. Mechanical Engineering 333H and 333T may not both be counted. Prerequisite: Rhetoric and Writing 306 with a grade of at least C-.

#### M E 334. Materials Engineering.

Fundamental aspects of the structure, properties, and behavior of engineering materials. Three lecture hours a week for one semester. Prerequisite: The following courses with a grade of at least C- in each: Chemistry 301, Mechanical Engineering 302, Physics 303K, Physics 103M; and credit or registration for Mechanical Engineering 134L, Physics 303L, 103N, and Engineering Mechanics 319.

#### M E 134L. Materials Engineering Laboratory.

Hands-on experiments in materials science and engineering topics and microstructure-property relationships discussed in Mechanical Engineering 334. One lecture hour and three laboratory hours a week for one semester. Prerequisite: Mechanical Engineering 302 with a grade of at least C-, credit or registration for Mechanical Engineering 334 and Engineering Mechanics 319.

#### M E 335. Engineering Statistics.

Fundamentals of probability, distribution theory, data analysis and statistics, interval estimation, hypothesis testing, and statistical quality control. Three lecture hours and one discussion hour a week for one semester. Prerequisite: Mathematics 408D with a grade of at least C- and credit or registration for Mechanical Engineering 318M.

#### M E 336. Materials Processing.

Effects of processing on materials properties; materials selection. Three lecture hours a week for one semester. Prerequisite: Mechanical Engineering 334 (or 311) and 134L (or 111L) or the equivalent and Engineering Mechanics 319 with a grade of at least C- in each.

#### M E 136L. Materials Processing Laboratory.

Hands-on study of selected materials processing procedures and processing-microstructure-property relationships discussed in Mechanical Engineering 336. One lecture hour and three laboratory hours a week for one semester. Prerequisite: Mechanical Engineering 111L and Engineering Mechanics 319 with a grade of at least C- in each, concurrent enrollment in Mechanical Engineering 336.

## M E 136N, 236N. Concepts in Nuclear and Radiation Engineering.

Restricted to students in the Colleges of Engineering, Liberal Arts, and Natural Sciences, and the Jackson School of Geosciences. For Mechanical Engineering 136N, one lecture hour a week for one semester; for 236N, the equivalent of two lecture hours a week for one semester. Prerequisite: Completion of at least thirty semester hours of college coursework, or consent of instructor.

#### M E 336P. Concepts in Nuclear and Radiation Engineering.

Introduces the many different aspects and applications of nuclear and radiation engineering/physics. Subjects covered include: history of nuclear development, basic concepts of radiation and radioactivity, radioactive waste management, global warming and the impact of nuclear power plants, industrial applications, health physics, nuclear medicine, job opportunities at power plants, non-proliferation, nuclear security, discussion of opportunities for graduate schools at national laboratories, tour of University of Texas nuclear research reactor along with three introductory laboratories. Three lecture hours a week for one semester. Mechanical Engineering 336P and 379M (Topic: Concepts

in Nuclear and Radiation Engineering) may not both be counted. Prerequisite: For engineering majors, Physics 303L and 103N with a grade of at least C- in each; for others, upper-division standing.

#### M E 337C. Introduction to Nuclear Power Systems.

Radioactivity, nuclear interactions: fission and fusion, fission reactors, nuclear power systems, nuclear power safety. Three lecture hours a week for one semester. Prerequisite: For engineering majors, Mechanical Engineering 218 and Physics 303L and 103N with a grade of at least C- in each; for others, upper-division standing and written consent of instructor.

#### M E 337F. Nuclear Environmental Protection.

lonizing radiation and its interactions with matter and living tissues; radioactive decay kinetics; external and internal dose measurement; transportation through the environment; managing radioactive waste streams; and safeguards. Three lecture hours a week for one semester. Mechanical Engineering 337F and 389C may not both be counted. Prerequisite: For engineering majors, Physics 303L and 103N with a grade of at least C- in each; for others, upper-division standing.

#### M E 337G. Nuclear Safety and Security.

An investigation of policy and technical aspects related to nuclear safety and security. Participants will evaluate the proliferation of risk from facilities within the nuclear fuel cycle. They will calculate the criticality conditions for a nuclear assembly and derive parent/daughter decay equations. Nuclear forensics evaluations will be conducted on real-world environmental measurements. Three lecture hours a week for one semester. Only one of the following may be counted: Mechanical Engineering 337G, 388H, Operations Research and Industrial Engineering 390R (Topic 15: Nuclear Safety and Security). Prerequisite: For engineering majors, Physics 103N and 303L with a grade of at least C- in each; for others, upper-division standing and written consent of instructor.

#### M E 338. Machine Elements.

Analysis for the design and manufacture of basic mechanical elements, and their role in the design of machines; application of finite element modeling. Three lecture hours a week for one semester. Prerequisite: Engineering Mechanics 319 and Mechanical Engineering 334 with a grade of at least C- in each.

#### M E 339. Heat Transfer.

Steady and transient heat conduction; forced and natural convection; radiation; introduction to heat exchangers and applications. Three lecture hours a week for one semester. Prerequisite: Mechanical Engineering 218 or 318M, 330, and 130L with a grade of at least C- in each; and credit or registration for Mechanical Engineering 139L.

#### M E 139L. Experimental Heat Transfer.

Experimental design concepts, uncertainty analysis, and systems analysis as applied to thermodynamics, fluid mechanics, and heat transfer systems. One lecture hour and two laboratory hours a week for one semester. Prerequisite: Credit or registration for Mechanical Engineering 339.

#### M E 340. Mechatronics.

Theory and application of electrical circuits, electronics, and electromechanical devices; concepts in electrical power transmission; instrumentation; feedback; integration of electronics and instrumentation with mechanical engineering systems (mechatronics). Three lecture hours a week for one semester. Prerequisite: Mathematics 408D, Physics 303L, and 103N with a grade of at least C- in each; and credit or registration for Mechanical Engineering 140L.

#### M E 140L. Mechatronics Laboratory.

Hands-on laboratory using hand-held and bench-top electronic test and prototyping equipment for circuits and mechatronics applications; computer-aided instrumentation and data acquisition; laboratory study in design, prototyping, and testing with electrical and electronics components and electromechanical devices. One lecture hour and two laboratory hours a week for one semester. Prerequisite: Credit or registration for Mechanical Engineering 340.

#### M E 343. Thermal-Fluid Systems.

Analysis and design of integrated systems involving simultaneous application of thermodynamics, heat transfer, and fluid mechanics. Applications to power generation, vehicle engineering, materials processing, environmental control, and manufacturing. Three lecture hours and one discussion hour a week for one semester. Prerequisite: Mechanical Engineering 330, 130L, 339, and 139L with a grade of at least C- in each.

#### M E 344. Dynamic Systems and Controls.

Lumped physical system models; electrical, fluid, mechanical, and thermal system analysis; linear system transient, steady-state behavior; introduction to feedback control. Three lecture hours a week for one semester. Prerequisite: Mathematics 427J or 427K, Mechanical Engineering 205 or 318M, and 324 with a grade of at least C- in each; Mechanical Engineering 340 and 140L with a grade of at least C- in each; and credit or registration for Mechanical Engineering 144L or 244L.

#### M E 144L, 244L. Dynamic Systems and Controls Laboratory.

Modeling of engineering systems, digital simulation, and assessment of results with experimental study; methods for analysis of first- and second-order systems, system identification, frequency response and feedback control principles; hands-on experimentation with mechanical, fluid, electrical, and magnetic systems; data acquisition and analysis using oscilloscopes and microcomputer-based analog-to-digital and digital-to-analog conversion; theoretical and practical principles governing the design and use of various sensors and transducers. For 144L, one lecture hour and two laboratory hours a week for one semester; for 244L, one lecture hour and three laboratory hours a week for one semester. Prerequisite: Credit or registration for Mechanical Engineering 344.

#### M E 347. Processing of Materials.

Analysis of forces in processing operations; effects of friction and their control; metalworking efficiencies. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: For engineering majors, Mechanical Engineering 334 or the equivalent; for nonengineering majors, upper-division standing and written consent of instructor.

**Topic 1: Powder Processing.** Powder particle characterization and size/shape/distribution, powder synthesis, compaction, sintering theory, sintering maps, full-density processing, powder-processed part microstructure and properties.

**Topic 2: Deformation Processing.** Analysis of forces in processing operations; effects of friction and their control; slab method; upperbound force theory; slip-line field theory; metalworking efficiencies.

#### M E 348E. Advanced Mechatronics I.

Integrated use of mechanical, electrical, and computer systems for information processing and control of machines and devices. System modeling, electromechanics, sensors and actuators, basic electronics design, signal processing and conditioning, noise and its abatement, grounding and shielding, filters, and system interfacing techniques. Three lecture hours and two laboratory hours a week for one semester. Mechanical Engineering 348C and 348E may not both be counted. Prerequisite: For engineering majors, Mechanical Engineering 340 or the equivalent; for nonengineering majors, upper-division standing and written consent of instructor.

#### M E 348F. Advanced Mechatronics II.

Interfacing microcomputers with sensors and actuators; hybrid (analog/ digital) design; digital logic and analog circuitry; data acquisition and control; microcomputer architecture, assembly language programming; signal conditioning, filters, analog-to-digital and digital-to-analog conversion. Three lecture hours and two laboratory hours a week for one semester. Mechanical Engineering 348D and 348F may not both be counted. Prerequisite: For engineering majors: Mechanical Engineering 340 or the equivalent; for nonengineering majors: upper-division standing and written consent of instructor.

#### M E 349. Corrosion Engineering.

Corrosion principles; electrochemical, environmental, and metallurgical effects; types of corrosion; corrosion testing and prevention; modern theories: principles and applications. Three lecture hours a week for one semester. Prerequisite: For engineering majors, Mechanical Engineering 334 (or 311) or the equivalent with a grade of at least C-, Mechanical Engineering 326 (or 326H) or the equivalent with a grade of at least C-; for others, upper-division standing and written consent of instructor.

#### M E 350. Machine Tool Operations for Engineers.

Hands-on manual and computer-numerical-controlled machine tool operation. Part design and tool selection for production. One lecture hour and six laboratory hours a week for one semester. Mechanical Engineering 350 and 379M (Topic 7: Machine Tool Operations for Engineers) may not both be counted. Offered on the letter-grade basis only.

#### M E 350R. Robot Mechanism Design.

Studies the analysis and synthesis of motions of mechanisms in order to design robotic systems. Examines motion properties of mechanisms including degrees of freedom, velocity, and acceleration. Explores ideas and motion analysis for robotic systems for a wide range of applications including spatial, industrial and medical robotics. Three lecture hours a week for one semester. Mechanical Engineering 350R and 379M (Topic: Robot Mechanism Design) may not both be counted. Prerequisite: Engineering Mechanics 306, and Mechanical Engineering 218 or 318M and 314D or 324, with a grade of at least C- in each.

#### M E 352K. Engineering Computer Graphics.

Introduction to interactive computer graphics as a tool in computeraided design. Use of graphics software packages. Two lecture hours and three laboratory hours a week for one semester. Prerequisite: For non-engineering majors, upper-division standing and written consent of instructor.

#### M E 353. Engineering Finance.

Evaluating the financial impact of engineering decisions. Comparing alternatives with cash flow analysis considering rate of return, inflation, and taxes, with emphasis on analyzing risk. Managing complex projects with activity scheduling and resource allocation considering cash flows. Methods include probabilistic analysis and simulation. Three lecture hours and two discussion hours a week for one semester. Prerequisite: Mathematics 408D, Mechanical Engineering 205 or 318M, and 335 with a grade of at least C- in each.

#### M E 354. Introduction to Biomechanical Engineering.

The application of mechanical engineering principles to problems in the life sciences; transport phenomena of physiological solids and fluids; biosignal analysis and instrumentation; biomaterials design and compatibility; principles of medical imaging, diagnostics, and therapeutics; rehabilitation engineering. Three lecture hours a week for one semester. Prerequisite: For engineering majors, Mathematics 427J or 427K with a grade of at least C-; for others, upper-division standing and written consent of instructor.

#### M E 354M. Biomechanics of Human Movement.

Modeling and simulation of human movement; neuromuscular control; computer applications; introduction to experimental techniques. Three lecture hours a week for one semester. Prerequisite: For non-engineering majors, upper-division standing and written consent of instructor.

#### M E 355K. Engineering Vibrations.

Time-domain and frequency-domain analysis of vibrating systems; matrix methods, instrumentation, and vibration control; numerical methods. Three lecture hours a week for one semester. Prerequisite: Mathematics 427J or 427K, and Mechanical Engineering 324 with a grade of at least C- in each.

#### M E 259, 359. Materials Selection.

Description of commercial metals, polymers, ceramics, concrete, and wood for use in mechanical engineering applications. Applications include strength, toughness, stiffness, fatigue, creep, corrosion, casting, forming, machining, and welding. Two or three lecture hours a week for one semester. Prerequisite: For engineering majors, Mechanical Engineering 334 or the equivalent; for nonengineering majors, upperdivision standing and written consent of instructor.

#### M E 360. Vehicle System Dynamics and Controls.

Fundamentals of ground vehicle dynamics, tire-road mechanics, vehicle control systems, vehicle stability, and simulation of vehicle systems. Three lecture hours a week for one semester. Only one of the following may be counted: Mechanical Engineering 360, 379M (Topic: Vehicle System Dynamics and Controls), 390, 397 (Topic: Vehicle System Dynamics and Controls). Prerequisite: For engineering majors, Mechanical Engineering 344 with a grade of at least C-; for others, upperdivision standing and written consent of instructor.

#### M E 360C. Cyber Vehicle Systems.

Study of the engineering principles of autonomous mobile robots. Subjects include understanding the dynamics of vehicle systems, and the principles and practical implementation of sensing, actuation, and control. Emphasis on providing practical laboratory study of these subjects using mobile robot platforms, and the use of the commercial software package LabVIEW for programming of real-time data acquisition and control targets. Simulation studies may also be conducted in LabVIEW and/or the Matlab environment, so some proficiency in use of both of these software packages is expected. Three lecture hours a week for one semester. Only one of the following may be counted: Mechanical Engineering 360C, 379M (Topic: Cyber Vehicle Systems), 390C, 397 (Topic: Cyber Vehicle Systems). Prerequisite: For engineering majors, Mechanical Engineering 344 with a grade of at least C-; for others, upper-division standing and written consent of instructor.

#### M E 260K, 360K. Metallurgy of Engineering Alloys.

Microstructure and property relationships of metals and alloys; steel alloys; aluminum alloys; titanium alloys; magnesium alloys; solidification and casting; thermomechanical processing; heat treating and solidstate phase transformations. Two or three lecture hours a week for one semester. Prerequisite: For engineering majors, Mechanical Engineering 334 (or 311) or the equivalent with a grade of at least C-; for others, upper-division standing and written consent of instructor.

#### M E 360L. Turbomachinery and Compressible Flow.

Positive displacement and dynamic rotating machinery; pumps, compressors, and turbines; performance characteristics and scaling

laws. One-dimensional compressible flow with area change, friction, or heat addition. Normal and oblique shock waves; Prandtl-Meyer expansion. Three lecture hours a week for one semester. Prerequisite: Mechanical Engineering 330, 130L and 139L.

#### M E 360N. Intermediate Heat Transfer.

Multidimensional and transient diffusion; laminar and turbulent convection; radiation exchange; special topics. Three lecture hours a week for one semester. Prerequisite: Mechanical Engineering 339.

#### M E 361E. Nuclear Reactor Operations and Engineering.

Fission and chain reactions; neutron diffusion and moderation; reactor equations; Fermi Age theory; and multigroup and multiregional analysis. Three lecture hours a week for one semester. Prerequisite: For engineering majors, Mechanical Engineering 218 and Physics 303L and 103N with a grade of at least C- in each; for others, upper-division standing and written consent of instructor.

#### M E 361F. Radiation and Radiation Protection Laboratory.

Introduction to the application of radiation and radiation protection instrumentation. Lecture and laboratory topics include personnel monitoring, radiation detection systems, gamma-ray spectroscopy, determination of environmental radiation, counting statistics, gamma and neutron shielding, and air sampling. Two lecture hours and three laboratory hours a week for one semester. Prerequisite: For engineering majors, Mechanical Engineering 218 with a grade of at least C-, Physics 303L and 103N with a grade of at least C- in each; for others, upperdivision standing and written consent of instructor.

#### M E 261M, 361M. Materials Thermodynamics.

First and second laws; heat of combustion; heat engine cycles; chemical equilibria and/or phase equilibria; point defects in crystals. Two or three lecture hours a week for one semester. Prerequisite: For engineering majors, Mechanical Engineering 334 (or 311) or the equivalent with a grade of at least C-, Mechanical Engineering 326 or 326H with a grade of at least C-; for others, upper-division standing and written consent of instructor.

#### M E 362K. Readings in Engineering.

A study of the interrelated problems of society, technology, and energy. Three lecture hours a week for one semester. Only one of the following may be counted: Mechanical Engineering 325L, 362K, 371K, 177K, 277K, 377K.

#### M E 363L. Energy Systems Laboratory.

Experimental analysis of thermal energy systems, including heat transfer equipment, engines, the University chilling station and the University power plant. Use of a variety of industrial instrumentation for assessment of system and component performance and of experimental uncertainty. Written and oral technical communication of experimental results. Two lecture hours and three laboratory hours a week for one semester. Prerequisite: Mechanical Engineering 339 and 139L.

#### M E 363M. Energy Technology and Policy.

An overview of energy technologies, fuels, environmental impacts and public policies. Subjects are interdisciplinary and include an introduction to quantitative concepts in energy, including the differences among fuels and energy technologies, energy policy levers, and the societal aspects of energy, such as culture, economics, war, and international affairs. Includes brief snippets of energy history, use of real-world examples, and looks forward into the future. Interactive and lecture-oriented around current events related to energy. Three lecture hours a week for one semester. Mechanical Engineering 363M and 379M (Topic: Energy Technology and Policy) may not both be counted. Prerequisite: Upperdivision standing.

#### M E 364D. Intermediate Dynamics.

Focuses on efficient formulation and solution of equations of motion for complex 3D multi-body mechanical systems. Emphasizes the formulation of the dynamical equations of motion using Kane's method and will use symbolic and numerical simulation techniques (MATLAB(R) and MotionGenesis) to solve these equations. Preparation for advanced research and professional work analyzing the dynamics of complex multi-body mechanical systems. Three lecture hours a week for one semester. Mechanical Engineering 364D and 379M (Topic: Intermediate Dynamics) may not both be counted. Prerequisite: Upper-division standing and the following courses with a grade of at least a C-: Mechanical Engineering 314D or equivalent and 318M or equivalent.

#### M E 364L. Automatic Control System Design.

Feedback principles; control components; industrial compensators; Routh, Nyquist, Bode, and root locus methods; controller design; continuous and discrete time control. Three lecture hours and onehalf laboratory hour a week for one semester. Prerequisite: Mechanical Engineering 344.

#### M E 365E. Engineering Entrepreneurship.

Focus on developing a basic understanding for the assessment of emerging technologies including the analysis of the status and future development issues, establish a comprehension of what 'market' means in terms of potential technology applications, and of how that market is identified and characterized. Create new knowledge about the potential match of an emerging technology with a defined market as a member of a multidisciplinary team, establish a basic understanding of IP rights, assessment and strategy related to emerging technology, and assess the course and participate in discussions about how it can be evolved for future offerings. Exploration the innovation and technology commercialization process especially as it relates to individual expertise and career goals. Three lecture hours a week for one semester. Mechanical Engineering 365E and 379M (Topic: Engineering Entrepreneurship) may not both be counted. Prerequisite: Upper-division standing.

#### M E 365K. Finite Element Method.

Introduction and application of the finite element method in engineering analysis and design problems; demonstration of techniques using commercial codes. Three lecture hours a week for one semester. Prerequisite: Engineering Mechanics 319 and Mathematics 427J or 427K with a grade of at least C- in each.

#### M E 365L. Industrial Design for Production.

Current techniques for making transitions from theoretical concepts to cost effective designs suitable for manufacturing. Three lecture hours a week for one semester. Prerequisite: Mechanical Engineering 338.

#### M E 366J. Mechanical Engineering Design Methodology.

An examination of structured methodologies for designing mechanical systems; reverse engineering/redesign projects and conceptual design projects. Three lecture hours and two laboratory hours a week for one semester. Prerequisite: The following coursework with a grade of at least C- in each: Mechanical Engineering 302, 330, 130L, 335, 338, 339, 139L, 340, and 140L; one of the following with a grade of at least C-: Mechanical Engineering 333H, 333T, Aerospace Engineering 333T, Biomedical Engineering 333T, Chemical Engineering 333T, Civil Engineering 333T, Electrical Engineering 333T, or Petroleum and Geosystems Engineering.

#### M E 266K. Mechanical Engineering Design Project.

Creative design, analysis, selection, development, and fabrication of engineering components and systems. Development of team project with faculty adviser and sponsoring engineer. Two lecture hours a week for one semester, with additional hours to be arranged. Prerequisite: Mechanical Engineering 344, 144L or 244L, 353, and 366J with a grade of at least C- in each.

#### M E 366L. Operations Research Models.

Same as Operations Research and Industrial Engineering 366. Formulation and solution-interpretation for operations research models requiring, for example, optimization, simulation, or analysis of Markov chains or queues. Applications include manufacturing design and control, routing and scheduling, plant location, inventory analysis, and management of queueing systems. Three lecture hours a week for one semester. Mechanical Engineering 366L and Operations Research and Industrial Engineering 366 may not both be counted. Prerequisite: For engineering majors, Mathematics 408D and Mechanical Engineering 318M with a grade of at least C- in each; for non-engineering majors, upper-division standing and written consent of instructor.

#### M E 266P. Design Project Laboratory.

Development of individual team project in association with faculty adviser and sponsoring project engineer. Four laboratory hours a week for one semester. Prerequisite: Mechanical Engineering 344, 144L or 244L, 353, and 366J with a grade of at least C- in each.

#### M E 366Q. Deterministic Methods for Operations Research.

Theory and algorithms for deterministic operations research methods. Algorithms for solving linear, integer, and nonlinear optimization models. Three lecture hours a week for one semester. Prerequisite: For nonengineering majors, upper-division standing and written consent of instructor.

#### M E 366R. Stochastic Methods for Operations Research.

Theory and algorithms for stochastic operations research methods. Algorithms related to stochastic processes: Markov chain analysis; queueing theory; stochastic inventory theory and decision analysis. Three lecture hours a week for one semester. Prerequisite: For engineering majors, Mechanical Engineering 335 or the equivalent; for non-engineering majors, upper-division standing and written consent of instructor.

#### M E 366T. Biomems and Bionems.

Micro/Nano technology has been used to create many new materials and devices with a vast range of applications in materials science, electronics and photonics, and biomedical applications. BioMEMS and BioNEMS is the application of micro/nano technology in the fields of biomedical and health sciences by offering advantages of small size (from submicron to a few mm), low cost, high throughput, and importantly requiring much less sample/reagent. Three lecture hours a week for one semester. Mechanical Engineering 366T and 379M (Topic: Biomems and Bionems) may not both be counted. Prerequisite: Upperdivision standing.

#### M E 367S. Simulation Modeling.

Same as Operations Research and Industrial Engineering 367. Basic concepts of discrete-event simulation. Statistical input and output analysis. Application of simulation software. Modeling of systems under uncertainty. Three lecture hours a week for one semester. Mechanical Engineering 367S and Operations Research and Industrial Engineering 367 may not both be counted. Prerequisite: For engineering majors, Mechanical Engineering 318M with a grade of at least C-, Mechanical

Engineering 335 or the equivalent; for non-engineering majors, upperdivision standing and written consent of instructor.

#### M E 368C. Additive Manufacturing.

Additive manufacturing (AM) is the use of layer-based processes for producing parts directly from computer (CAD) models, without partspecific tooling. Students learn about a variety of additive manufacturing (AM) AM technologies, their potential to support rapid prototyping and manufacturing, and some of of the important research challenges associated with AM. Three lecture hours a week for one semester. Mechanical Engineering 368C and 379M (Topic: Additive Manufacturing) may not both be counted. Prerequisite: Grade of at least C- or registration for Mechanical Engineering 366J.

#### M E 368J. Computer-Aided Design.

Application of computers to design problems and simulation of mechanical systems; creation of interactive special applications programs. Three lecture hours and two laboratory hours a week for one semester. Prerequisite: Credit or registration for Mechanical Engineering 338.

#### M E 369L. Introduction to Computational Fluid Dynamics.

Applied numerical analysis, including solution of linear algebraic equations and ordinary and partial differential equations; modeling of physical processes, including fluid flow and heat and mass transfer; use of general purpose computer codes, including commercial computational fluid dynamics software packages. Three lecture hours a week for one semester. Only one of the following may be counted: Aerospace Engineering 347, Computational Engineering 347, Mechanical Engineering 369L. Prerequisite: Credit or registration for Mechanical Engineering 330 and 339.

#### M E 369M. Computational Methods in Thermal/Fluid Systems.

Use of basic tools of computational mathematics to set up numerical simulations for a variety of problems in thermo fluids. Explicit versus implicit time-stepping schemes, the issues of numerical stability and numerical errors, the issue of computational costs, difficulties with boundary and initial conditions, basic decision paths in the choice of numerical methods depending on the target system, and design of diagnostic steps. Three lecture hours a week for one semester. Mechanical Engineering 369M and 379M (Topic: COMPUT METH THERMAL/FLUID SYS) may not both be counted. Prerequisite: Upper-division standing.

#### M E 369P. Application Programming for Engineers.

Designed for students who have some experience in programming and are interested in the sharing and development of open source software applications. Provides an introduction to the Python Programming language, an open source, flexible, and intuitive debug programming language, with an emphasis on system modeling, simulation, data analysis, and software/data management. Students will create mini projects in Python that demonstrate software design and organization, debugging, open source practices, and data visualization. Three lecture hours a week for one semester. Prerequisite: For engineering majors, Mechanical Engineering 318M or the equivalent with a grade of at least C-; for others, upper-division standing and written consent of instructor.

#### M E 371D. Medical Device Design and Manufacturing.

Explores how to solve medical device design problems using systematic design thinking and practices. Interpret clinical needs and define an open engineering medical device design problem, including formulating engineering requirements/specifications to address a marketable need, generate concepts in a way that promotes both creativity and usefulness, make well-informed, well-justified design decisions in the early and later stages of design, design and analyze experiments,

follow statistical best practices in Design of Experiments(DoE), embody solutions with "Design for X" considerations, and communicate intermediate and final designs clearly and effectively in written and oral formats. Three lecture hours a week for one semester. Mechanical Engineering 371D and 379M (Topic: Medical Device Design and Manu) may not both be counted. Prerequisite: Upper-division standing.

#### M E 371K. Legal Aspects of Engineering Practice.

Legal considerations in the practice of engineering; specifications and contracts for equipment and engineering services. Three lecture hours a week for one semester. Only one of the following may be counted: Mechanical Engineering 325L, 362K, 371K, 177K, 277K, 377K. Prerequisite: Upper-division standing.

#### M E 372J. Robotics and Automation.

Component technologies for precision machines based on dynamic modeling and motion programming: cams, linkages, planar robot manipulators and open architecture vehicles. Homework includes 15 simulations. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and credit or registration for Mechanical Engineering 324.

#### M E 372M. Mechanism Design.

Design of planar mechanisms for applications that require rigid body guidance, function generation, and path generation. Graphical and analytical techniques. Computer-aided design projects. Three lecture hours a week for one semester. Prerequisite: Credit or registration for Mechanical Engineering 324.

#### M E 372N. Design of Smart Mechanisms.

Design of reprogrammable multiple-degree-of-freedom architectures. The course addresses various mechanical configurations and stresses the integrated design approach to sensing/actuation/control architecture and control software. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and consent of instructor.

#### M E 373K. Basic Industrial Engineering.

Same as Operations Research and Industrial Engineering 371. Design and analysis of production systems, including plant layout and location, material flow, and flexible manufacturing. Three lecture hours a week for one semester. Mechanical Engineering 373K and Operations Research and Industrial Engineering 371 may not both be counted. Prerequisite: For engineering majors, Mechanical Engineering 318M or the equivalent with a grade of at least C-, and Mechanical Engineering 335 or the equivalent; for non-engineering majors, upper-division standing and written consent of instructor.

#### M E 374C. Combustion Engine Processes.

Principles of internal combustion engines, fuels, carburetion, combustion, exhaust emissions, knock, fuel injection, and factors affecting performance. Three lecture hours a week for one semester. Prerequisite: Mechanical Engineering 339 or consent of instructor.

#### M E 374D. Automotive Engineering Laboratory.

Engines and emissions. Students use commercial engine-modeling software to explore effects of valve timing and intake tuning and conduct experiments with vehicle emissions, ignition timing, engine mechanisms, engine controls, and emissions control. One lecture hour and four laboratory hours a week for one semester. Prerequisite: Credit or registration for Mechanical Engineering 374C.

#### M E 374E. Race Car Engineering and Project Management.

Explores designing a Formula SAE race car, a hot rod (UT's 1937 Chevy project), and a Formula SAE Electric race car. Divided into four major sections: Project Management, including tools for project organization and management, Powertrain, including engine basics, calibration, intake and exhaust design, cooling and oiling systems, fuel economy and emissions, transmission/differential, vehicle performance modeling, Brake systems, longitudinal weight transfer, longitudinal force requirements of the tires for both braking and acceleration, tires and tire models, and Vehicle dynamics (suspension systems, anti-roll bars, lateral weight transfer, tires and tire models). Three lecture hours a week for one semester. Mechanical Engineering 374E and 379M (Topic: RACECAR ENGR & PROJ MANAGEMENT) may not both be counted. Prerequisite: The following courses with a grade of at least a C- in each: Mechanical Engineering 330 and 130L; and credit or registration for 339 and 139L.

#### M E 374F. Fire Science.

Analysis of the dynamics and consequences of fire in structures. Topics include combustion thermochemistry, premixed and diffusion flames, fluid mechanics of fire, human tenability in burning structures, and computer modeling of fires. Three lecture hours a week for one semester. Prerequisite: For engineering majors, upper-division standing and credit or registration for Mechanical Engineering 339 and 139L with a grade of at least C- in each; for others, upper-division standing and written consent of instructor.

#### M E 374L. Design of Thermal Systems.

Methodology and approach to design of thermal energy systems; component and system modeling; optimization, including economic considerations. Three lecture hours a week for one semester. Prerequisite: Mechanical Engineering 339 or the equivalent.

#### M E 374R. Design of Air Conditioning Systems.

Load calculations, design of thermal distribution systems, component selection and control. Three lecture hours a week for one semester. Prerequisite: Credit or registration for Mechanical Engineering 339.

#### M E 374S. Solar Energy Systems Design.

Insolation characteristics and measurement, component design, solar energy system modeling, introduction to photovoltaic systems, cost analysis, and case studies. Three lecture hours a week for one semester. Prerequisite: Mechanical Engineering 339 or the equivalent.

#### M E 374T. Renewable Energy Technology.

Cultivates an enhanced level of theoretical and conceptual understanding of thermodynamics, fluid mechanics and heat transfer, and of how these disciplines apply to the design and analysis of complex thermal-fluid systems. Enhances skills in designing, programming and debugging software tools for systems analysis, working in teams, and communicating engineering results in a professional manner. Three lecture hours a week for one semester. Mechanical Engineering 374T and 379M (Topic: Renewable Energy Technology) may not both be counted. Prerequisite: The following courses with a grade of at least a C- in each: Mechanical Engineering 316T, 318M, 330, 130L, 339, and 139L.

#### M E 375K. Production Engineering Management.

Same as Operations Research and Industrial Engineering 372. Introduction to production and inventory models; basic factory dynamics; analysis of variability; push-and-pull production control; sequencing and dispatching. Three lecture hours a week for one semester. Mechanical Engineering 375K and Operations Research and Industrial Engineering 372 may not both be counted. Prerequisite: For engineering majors, Mechanical Engineering 318M or the equivalent with a grade of at least C-, Mechanical Engineering 335 or the equivalent; for non-engineering majors, upper-division standing and written consent of instructor.

#### M E 376N. High Throughput Nanopatterning.

Introduction to the basic tools and materials involved in the patterning processes needed to create nano-scale structures and functional materials and discusses the relevance of these processes to applications in the electronics, display, and energy industries. Includes take-home portable nano-labs which allow hands-on experience in nanoscale fabrication processes and relevant nanometrology techniques. Explores industry and research roadmaps that provide relevant metrics and timelines for fabrication, materials, nano-enabled components and devices. Exposure to relevant computational modeling and simulation tools allows exploration of novel nano-enabled components and devices. Three lecture hours a week for one semester. Mechanical Engineering 376N and 379M (Topic: High Throughput Nanopatterning) may not both be counted. Prerequisite: Upper-division standing.

#### M E 177K, 277K, 377K. Projects in Mechanical Engineering.

Independent project carried out under the supervision of a faculty member in mechanical engineering. Student prepares a project proposal and a final report, each of which is evaluated by the faculty committee on individual projects. For 177K, three to five laboratory hours and one consultation hour with the faculty supervisor a week for one semester; for 277K, five to ten laboratory hours and one consultation hour with the faculty supervisor a week for one semester; for 377K, ten to fifteen laboratory hours and one consultation hour with the faculty supervisor a week for one semester. Only one of the following may be counted: Mechanical Engineering 325L, 362K, 371K, 177K, 277K, 377K. Prerequisite: A University grade point average of at least 2.50 and a grade point average in the major of at least 2.50; and approval of project proposal by the faculty committee on individual projects.

#### M E 378C. Electroceramics.

Bonding; crystal structures; defects; phase diagrams; glass ceramics; electrical, dielectric, magnetic, and optical ceramics. Three lecture hours a week for one semester. Prerequisite: For engineering majors, Mechanical Engineering 334 (or 311) or the equivalent with a grade of at least C-; for others, upper-division standing and written consent of instructor.

#### M E 378D. Failure Analysis.

Introduction to methodology of analyzing failures of engineering parts and devices. Explores a broad range of analysis, but the focus is on understanding fractography and relating this back to material and mechanics relevant to failure to determine the likely root cause(s). Lectures are primarily based on case studies and are supplemented by two hands-on class projects, one performed individually and the other larger project performed as a team project. Three lecture hours a week for one semester. Mechanical Engineering 378D and 379M (Topic: Failure Analysis) may not both be counted. Prerequisite: For engineering majors, the following courses with a grade of at least a C- in each: Engineering Mechanics 319, Mechanical Engineering 334 and 134L or equivalent.

#### M E 378E. Nanotechnology for Sustainable Energy.

Demonstrates the role of nanoscale materials in solving one of the most critical socio-economic issues of our time, affordable and sustainable energy. An overview of emerging nanotechnology, and how people can critically impact many energy technologies (from energy harvesting, conversion, to storage). Explores various types of energy devices, including solar cell, solar fuel, piezoelectrics, thermoelectrics, battery, supercapacitor, and fuel cell as well as basic device principles, current technology status and new opportunities of nanotechnology for energy device applications. Content is at the intersection of nanoscale science and engineering, and energy science and technology. Three lecture hours a week for one semester. Mechanical Engineering 378E and 379M (Topic: NANOTECH FOR SUSTAINABL ENERGY) may not both be counted. Prerequisite: Upper-division standing, and the following courses with a grade of at least C-: Chemistry 301, Mechanical Engineering 334 or equivalent, Physics 303L and 103N.

#### M E 378K. Mechanical Behavior of Materials.

Elastic deformation; viscoelasticity; yielding, plastic flow, plastic instability, strengthening mechanisms; fracture, fatigue, creep; significance of mechanical properties tests. Three lecture hours a week for one semester. Prerequisite: For engineering majors, Mechanical Engineering 334 or the equivalent and 134L with a grade of at least C- in each; for others, upper-division standing and written consent of instructor.

#### M E 378P. Properties and Applications of Polymers.

Introduction to polymers as structural materials: polymerization, polymer structure, physical and mechanical properties, processing and fabrication. Three lecture hours a week for one semester. Prerequisite: For engineering majors, Mechanical Engineering 334 (or 311) or the equivalent with a grade of at least C-, Mechanical Engineering 326 or 326H or the equivalent with a grade of at least C-; for others, upper-division standing and written consent of instructor.

#### M E 378Q. Polymer Nanocomposites.

Fundamentals, properties, and applications of polymer nanocomposites. Three lecture hours a week for one semester. Mechanical Engineering 378Q and 379M (Topic: Polymer Nanocomposites) may not both be counted. Prerequisite: Mechanical Engineering 334 and 134L with a grade of at least C-.

#### M E 378S. Structural Ceramics.

Powder processing, powder characterization, forming techniques, densification, and development of microstructure; emphasis on understanding materials, selection, and microstructure-mechanical property relationships. Three lecture hours a week for one semester. Prerequisite: For engineering majors, Mechanical Engineering 334 (or 311) or the equivalent with a grade of at least C-; for others, upperdivision standing and written consent of instructor.

#### M E 679H. Undergraduate Honors Thesis.

Research performed during two consecutive semesters under the supervision of an engineering faculty member; topics are selected jointly by the student and the faculty member with approval by the director of the Engineering Honors Program. The student makes an oral presentation and writes a thesis. Individual instruction for two semesters. Students pursuing both the Bachelor of Arts, Plan II, and a bachelor's degree in engineering may use this course to fulfill the thesis requirement for the Bachelor of Arts, Plan II. Prerequisite: For 679HA, enrollment in the Engineering Honors Program; for 679HB, Mechanical Engineering 679HA and enrollment in the Engineering Honors Program.

#### M E 179M, 279M, 379M. Topics in Mechanical Engineering.

For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Prerequisites vary with the topic.

**Topic 1: Design of Machines and Systems.** Restricted to students in the UTeach Engineering Program. Introduction to techniques for analyzing and designing machine components (linkages, cams, springs, gears, etc.) within the context of reverse engineering and redesigning existing products. Covers the application of structure methods for engineering design and prototyping. Mechanical Engineering 179M, 279M, 379M (Topic 1) and 379M (Topic: Design of Machines and Systems) may not both be counted.

#### M E 379N. Engineering Acoustics.

Same as Electrical Engineering 363N. Principles of acoustics, with applications drawn from audio engineering, biomedical ultrasound, industrial acoustics, noise control, room acoustics, and underwater sound. Three lecture hours a week for one semester. Prerequisite: Mathematics 427J or 427K with a grade of at least C-.

#### M E 379Q. Musical Acoustics.

Restricted to students outside the Cockrell School of Engineering. Designed to help students develop the intuition and vocabulary for understanding the basic physical principles relevant to musical instruments and sound (e.g., mechanics, vibrations, acoustics, harmonics, acoustic-electronic conversions, speakers, hearing, perception, room acoustics) in order to be able to read basic articles on the subject of musical acoustics. Material is kept relevant to musical principles (e.g., performance techniques, scales/harmony) throughout. Three lecture hours a week for one semester. Mechanical Engineering 379M (Topic: Musical Acoustics) and 379Q may not both be counted.

## Operations Research and Industrial Engineering: ORI

#### **Lower-Division Courses**

#### **Upper-Division Courses**

#### **ORI 366. Operations Research Models.**

Same as Mechanical Engineering 366L. Formulation and solutioninterpretation for operations research models requiring, for example, optimization, simulation, or analysis of Markov chains or queues. Applications include manufacturing design and control, routing and scheduling, plant location, inventory analysis, and management of queueing systems. Three lecture hours a week for one semester. Mechanical Engineering 366L and Operations Research and Industrial Engineering 366 may not both be counted. Prerequisite: For engineering majors, Mathematics 408D and Mechanical Engineering 318M with a grade of at least C- in each; for non-engineering majors, upper-division standing and written consent of instructor.

#### **ORI 367. Simulation Modeling.**

Same as Mechanical Engineering 367S. Basic concepts of discreteevent simulation. Statistical input and output analysis. Application of simulation software. Modeling of systems under uncertainty. Three lecture hours a week for one semester. Mechanical Engineering 367S and Operations Research and Industrial Engineering 367 may not both be counted. Prerequisite: For engineering majors, Mechanical Engineering 318M with a grade of at least C-, Mechanical Engineering 335 or the equivalent; for non-engineering majors, upper-division standing and written consent of instructor.

#### **ORI 368. Production and Inventory Control.**

Issues in inventory control with known and unknown demand, materials requirement planning, just-in-time, pull control systems, operations scheduling, dispatching and aggregate planning, and the basic dynamics of production and inventory control. Three lecture hours a week for one semester. Prerequisite: For engineering majors, Mechanical Engineering 318M or the equivalent with a grade of at least C-, Mechanical Engineering 335 or the equivalent; for others, upper-division standing and written consent of instructor.

#### ORI 369. Decision Analysis.

Principles and application of techniques for the logical illumination of complex decision problems within any context. Subjects may include utility theory, probability as a statement of belief, risk preference, value of information and control, probability assessment, influence diagrams, risk sharing and scaling, and life-and-death decision making. Three lecture

hours a week for one semester. Prerequisite: Mechanical Engineering 353 or equivalent with a grade of at least C-.

#### ORI 370. Statistical Methods in Manufacturing.

Contemporary concepts and methods for statistical quality design and control will be presented. These include: descriptive statistics, behavior of process over time, design and interpretation of control charts, process capability studies, measurement system analysis, correlation and regression analysis, design and analysis of two level factorial experiments, design and analysis of two level fractional factorial experiments, response surface methodology, and Taguchi approach to robust design. Three lecture hours a week for one semester. Mechanical Engineering 379M (Topic: Stat Methods in Manufacturing) and Operations Research and Industrial Engineering 370 may not both be counted. Prerequisite: For engineering majors, Mechanical Engineering 318M with a grade of at least C-, Mechanical Engineering 335 or the equivalent; for others, upper-division standing and written consent of instructor.

#### **ORI 371. Basic Industrial Engineering.**

Same as Mechanical Engineering 373K. Design and analysis of production systems, including plant layout and location, material flow, and flexible manufacturing. Three lecture hours a week for one semester. Mechanical Engineering 373K and Operations Research and Industrial Engineering 371 may not both be counted. Prerequisite: For engineering majors, Mechanical Engineering 318M or the equivalent with a grade of at least C-, and Mechanical Engineering 335 or the equivalent; for non-engineering majors, upper-division standing and written consent of instructor.

#### **ORI 372. Production Engineering Management.**

Same as Mechanical Engineering 375K. Introduction to production and inventory models; basic factory dynamics; analysis of variability; push-and-pull production control; sequencing and dispatching. Three lecture hours a week for one semester. Mechanical Engineering 375K and Operations Research and Industrial Engineering 372 may not both be counted. Prerequisite: For engineering majors, Mechanical Engineering 318M or the equivalent with a grade of at least C-, Mechanical Engineering 335 or the equivalent; for non-engineering majors, upperdivision standing and written consent of instructor.

## Hildebrand Department of Petroleum and Geosystems Engineering

## Petroleum and Geosystems Engineering: PGE

#### **Lower-Division Courses**

#### PGE 301. Engineering, Energy, and the Environment.

Enrollment limited to beginning students in petroleum and geosystems engineering. Introduction to the field of petroleum engineering. Overview of energy supply and demand. Studies subsurface engineering and engineering problem-solving methods, with an emphasis on fossil energy exploitation and geologic CO2 storage. Includes aspects of basic petroleum geology. Two lecture hours and three laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Credit with a grade of at least C- or registration for Geological Sciences 401 or 303.

#### PGE 305. Energy and the Environment.

The forms of current and potential energy sources, and how these might impact the earth's environment. Three lecture hours and one and one-half

laboratory hours a week for one semester. May not be counted toward a degree in geological sciences, geosystems engineering and hydrology, or petroleum engineering.

#### PGE 310. Formulation and Solution of Geosystems Engineering Problems.

Introduction to mathematical equations typically encountered in petroleum and geosystems engineering; methods to solve equations graphically, analytically, and with numerical methods; applications of computers to problem solving. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Physics 303K and 103M and credit or registration for Mathematics 427J or 427K.

#### PGE 312. Physical and Chemical Behavior of Fluids I.

Principles of organic chemistry; phase behavior; properties of hydrocarbon gases and liquids and oil field waters; overview of laboratory phase behavior measurements; material balance calculations. Three lecture hours a week for one semester. Petroleum and Geosystems Engineering 312 and 427 may not both be counted. Offered on the lettergrade basis only. Prerequisite: Chemistry 302 with a grade of at least C-.

#### PGE 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Petroleum and Geosystems Engineering.

Used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Petroleum and Geosystems Engineering. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

### **Upper-Division Courses**

#### PGE 421K. Physical and Chemical Behavior of Fluids II.

Applications of thermodynamics and physical chemistry to petroleum and geosystems engineering. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: Petroleum and Geosystems Engineering 326.

#### PGE 322K. Transport Phenomena in Geosystems.

Applications of mass, heat, and momentum balances to fluid flow problems; shell balances; non-Newtonian fluids; transport processes through permeable media. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Engineering Mechanics 306, and Mathematics 427J or 427K with a grade of at least C- in each.

#### PGE 323K. Reservoir Engineering I: Primary Recovery.

Restricted to geosystems engineering and hydrogeology and petroleum engineering majors. Classification of subsurface reservoirs by type and recovery mechanism; reserve estimates based on material balance; steady-state and transient fluid flow in permeable reservoir rocks as applied to subsurface engineering problems. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: The following with a grade of at least C-: Petroleum and Geosystems Engineering 310, 326, and 427; and credit with a grade of at least Cor registration in 322K; and credit or registration in Petroleum and Geosystems Engineering 424.

## PGE 323L. Reservoir Engineering II: Secondary and Tertiary Recovery.

Restricted to geosystems engineering and hydrogeology and petroleum engineering majors. Introduction to reservoir displacement processes; water and gas injection; enhanced recovery. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Credit with a grade of at least C- for Mathematics 427J or 427K, Petroleum and Geosystems Engineering 310, 322K, 323K, and 424.

#### PGE 323M. Reservoir Engineering III: Numerical Simulation.

Restricted to geosystems engineering and hydrogeology and petroleum engineering majors. Mathematical equations governing fluid flow in reservoirs; numerical methods to solve the equations; numerical reservoir simulation; treatment of wells; history matching; a simulation project performed using a commercial simulator. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Petroleum and Geosystems Engineering 323L with a grade of at least C-.

#### PGE 424. Petrophysics.

Properties of rocks; measurement and interpretation of petrophysical properties; application of petrophysics to subsurface engineering problems; interaction of resident fluids with rocks. Extensive written reporting. Three lecture hours and three laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Geological Sciences 416M or 316P, Petroleum and Geosystems Engineering 333T and Physics 303L with a grade of at least C- and credit or registration with at least a C- for Petroleum and Geosystems Engineering 322K.

#### PGE 325L. Cooperative Engineering.

This course covers the work period of petroleum engineering students in the Cooperative Engineering Program. Forty laboratory hours a week for three semesters. The student must complete Petroleum and Geosystems Engineering 325LX, 325LY, and 325LZ before a grade and degree credit are awarded. Prerequisite: For 325LX, application to become a member of the Cooperative Engineering Program, approval of the dean, and appointment for a full-time cooperative work tour; for 325LY, Petroleum and Geosystems Engineering 325LX and appointment for a full-time cooperative work tour; for 325LZ, Petroleum and Geosystems Engineering 325LY and appointment for a full-time cooperative work tour.

#### PGE 225M. Cooperative Engineering.

Covers the work period of petroleum engineering students in the Cooperative Engineering Program. Forty laboratory hours a week for two semesters. The student must complete Petroleum and Geosystems Engineering 225MA and 225MB before a grade and degree credit are awarded. Prerequisite: For 225MA, application to become a member of the Cooperative Engineering Program, approval of the dean, and appointment for a full-time cooperative work tour; for 225MB, Petroleum and Geosystems Engineering 225MA and appointment for a full-time cooperative work tour.

#### PGE 125N. Cooperative Engineering.

Covers the work period of petroleum engineering students in the Cooperative Engineering Program. One lecture hour a week for one semester. May be repeated for credit. Prerequisite: Petroleum and Geosystems Engineering 325L or 225M, application to become a member of the Cooperative Engineering Program, approval of the dean, and appointment for a full-time cooperative work tour.

#### PGE 326. Thermodynamics and Phase Behavior.

Restricted to geosystems engineering and hydrogeology and petroleum engineering majors. Basics of phase behavior, classical thermodynamics in terms of material and energy balances, and applications to changes of state of petroleum fluids. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Chemistry 302 with a grade of at least C-, and credit with a grade of at least C- or registration for Mathematics 427J or 427K.

#### PGE 427. Properties of Petroleum Fluids.

Restricted to students admitted to major sequence in geosystems engineering and hydrogeology or petroleum engineering. Principles of organic chemistry, phase behavior of multicomponent mixtures, properties of hydrocarbon gases and liquids and oil field waters, overview of laboratory phase behavior measurements, and material balance calculations. Three lecture hours and three laboratory hours a week for one semester. Petroleum and Geosystems Engineering 312 and 427 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Chemistry 302 and Petroleum and Geosystems Engineering 326 with a grade of at least C- in each.

#### PGE 430. Drilling and Well Completions.

Elements of rock mechanics, drilling fluids, factors affecting rate of penetration, and well completions, including casing and tubing design. Three lecture hours and one and one-half laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Engineering Mechanics 319 with a grade of at least C-, credit with a grade of at least C- or registration for Petroleum and Geosystems Engineering 322K.

#### PGE 333T. Engineering Communication.

Advanced technical communication skills, with emphasis on writing strategies for technical documents, oral presentations, and visual aids. Three lecture hours a week for one semester. Prerequisite: Rhetoric and Writing 306 with a grade of at least C-.

#### PGE 334. Reservoir Geomechanics.

Restricted to geosystems engineering and hydrogeology and petroleum engineering majors. Basic stress and strain analysis; pore pressure and in situ stress estimation and measurement; deformation mechanisms in rock; rock fracture description and analysis; wellbore stresses and failure; wellbore stability analysis; fault stability analysis; depletioninduced reservoir deformation; and hydraulic fracturing. Emphasis on applications to petroleum engineering. Two lecture hours and three laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Engineering Mechanics 319 and Petroleum and Geosystems Engineering 301 with a grade of at least C- in each.

#### PGE 337. Introduction to Geostatistics.

Restricted to geosystems engineering and hydrogeology and petroleum engineering majors. Basic probability and statistics, study of correlated variables, statistical interpolation and simulation, and global optimization. Emphasis is on the ways the results of these procedures are related to geology and fluid flow. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Mathematics 408D or 408M, and Petroleum and Geosystems Engineering 310 with a grade of at least C- in each.

#### PGE 358. Principles of Formation Evaluation.

Restricted to geosystems engineering and hydrogeology and petroleum engineering majors. Integrated petrophysical interpretation of well logs, core laboratory measurements, and geological data for static, dynamic, and geophysical appraisal of subsurface rock formations. Three lecture hours per week for one semester. Petroleum and Geosystems Engineering 358 and 368 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit for Geological Sciences 416M or 316P, Physics 303L and 103N and Petroleum and Geosystems Engineering 424 with a grade of at least C-.

#### PGE 361. Advanced Reservoir Engineering.

Secondary recovery methods; computer simulation of reservoir performance; applications to field problems. Three lecture hours a week

for one semester. Prerequisite: Petroleum and Geosystems Engineering 326 and 323K.

#### PGE 362. Production Technology and Design.

Restricted to petroleum engineering majors. Analysis, specification, and characteristics of production systems; inflow performance; wellbore and tubing hydraulics; and artificial lift. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Credit with at least a C- or registration for Petroleum and Geosystems Engineering 430.

#### PGE 363. Petroleum Leasing Regulations and Practices.

Restricted to petroleum engineering majors. Domestic and worldwide regulations associated with petroleum leasing, including offshore areas, and environmental provisions concerning petroleum exploration and production. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Credit with a grade of at least C- or registration for Petroleum and Geosystems Engineering 365.

#### PGE 364. Natural Gas Engineering.

Production, transportation, and storage of gas; metering and gauging; performance of wells; estimation of gas reserves; prevention of waste and utilization of natural gas. Three lecture hours a week for one semester. Prerequisite: For petroleum engineering majors, Petroleum and Geosystems Engineering 326, 323K, and 362; for others, upper-division standing and consent of instructor.

#### PGE 365. Resource Economics and Valuation.

Restricted to petroleum engineering majors. Derivation of profitability criteria for earth resource investments, project analysis in terms of the interrelation of technical and economic factors, investment analysis in the presence of uncertainty, and project planning. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Petroleum and Geosystems Engineering 310 and 323K with a grade of at least C-.

#### PGE 368. Fundamentals of Well Logging.

Restricted to geosystems engineering and hydrogeology and petroleum engineering majors. Principles, applications, and interpretation of well logs as used in exploration and evaluation of subsurface formations. Three lecture hours a week for one semester. Petroleum and Geosystems Engineering 358 and 368 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit for Geological Sciences 416M or 316P, Physics 303L, and 103N and Petroleum and Geosystems Engineering 424 with a grade of at least C-.

#### PGE 371. Energy Finance.

Restricted to petroleum engineering majors. Fundamentals of finance as applied to the petroleum industry, including petroleum project financing techniques, investigating sources of capital, and methods used to evaluate an oil company's financial performance. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Credit with a grade of at least C- or registration for Petroleum and Geosystems Engineering 365.

#### PGE 372. Advanced Drilling and Well Completions.

Applications of geomechanics in wellbore and near-wellbore problems encountered in drilling and completing high-pressure, high-temperature wells on land and water locations. Three lecture hours a week for one semester. Petroleum and Geosystems Engineering 372 and 379 (Topic: Advanced Drilling and Well Completions) may not both be counted. Prerequisite: Petroleum and Geosystems Engineering 430 and 334 with a grade of at least C-.

#### PGE 373L. Geosystems Engineering Design and Analysis.

Restricted to geosystems engineering and hydrogeology and petroleum engineering majors. Team-oriented design projects involving the application of geologic and engineering methods to the solution of subsurface problems, using field case histories. Projects are selected for each student based on his or her petroleum engineering technical area option. The equivalent of three lecture hours a week for one semester, with additional hours to be arranged. Offered on the letter-grade basis only. Prerequisite: Petroleum and Geosystems Engineering 323K, 323L, 362, and 368 with a grade of at least C- in each.

## PGE 176, 276, 376. Special Problems in Petroleum and Geosystems Engineering.

Independent investigation of an advanced subject in petroleum and geosystems engineering, for superior students only. Conference course. Prerequisite: Admission to an appropriate major sequence in engineering and written consent of instructor.

#### PGE 377. Deepwater Operations.

Restricted to students admitted to major sequence in geosystems engineering and hydrogeology or petroleum engineering. Overview of various technical, logistical, and managerial elements that are functionally integrated in deepwater operations, with emphasis on applications in the Gulf of Mexico. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Petroleum and Geosystems Engineering 323K, 430, 334, and 362.

#### PGE 378. Applied Reservoir Characterization.

Restricted to petroleum engineering and geosystems engineering and hydrogeology majors. Reservoir modeling using software tools for statistical analysis of reservoir data; variogram analysis and modeling; spatial interpolation (kriging); tools for data integration in kriging; stochastic simulation of rock-types (lithology), pay thickness/porosity, and permeability; inputting geological models into flow simulation; uncertainty assessment. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Geological Sciences 416M or 316P with at least a C-, and Petroleum and Geosystems Engineering 310, 337, and 323M with a grade of at least C-.

#### PGE 379. Studies in Petroleum and Geosystems Engineering.

Special courses or seminars on recent developments in engineering. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: Admission to an appropriate major sequence in engineering or consent of instructor; additional prerequisites vary with the topic.

Topic 10: Artificial Lift. Restricted to geosystems engineering and hydrogeology and petroleum engineering majors. Life of a well, well testing, gas and plunger lift, progressive cavity pumps, electric submersible pumps, and beam lift. Petroleum and Geosystems Engineering 379 (Topic: Artificial Lift) and 379 (Topic 10) may not both be counted. May be used to fulfill the technical elective requirement for the Bachelor of Science in Petroleum Engineering degree. Offered on the letter-grade basis only. Additional prerequisite: Petroleum and Geosystems Engineering 430 and 362 with a grade of at least C-. Topic 11: Facilities Management. Restricted to geosystems engineering and hydrogeology or petroleum engineering majors. Petroleum fluid characteristics, process control, separators, metering, produced water, tanks, gas processing, gas compression, and liquid pumps. Petroleum and Geosystems Engineering 379 (Topic: Oil and Gas Production Facilities Design) and 379 (Topic 11) may not both be counted. May be used to fulfill the technical elective requirement for the Bachelor of Science in Petroleum Engineering degree. Offered on the letter-grade basis only. Additional prerequisite: Petroleum and Geosystems Engineering 362 with a grade of at least C-.

#### Topic 12: Blowout Prevention and Control. Background in

hydrostatics, hydrodynamics, hydraulics, geomechanics, mechanical systems, and procedures as they apply to well control. Petroleum and Geosystems Engineering 379 (Topic: Blowout Prevention and Control) and 379 (Topic 12) may not both be counted. Offered on the lettergrade basis only. Additional prerequisite: Upper-division standing and Petroleum and Geosystems Engineering 430 with at least a C-.

Topic 13: Fundamentals of Enhanced Oil Recovery Techniques.

Overview of the fundamental displacement concepts of chemical, miscible, and thermal enhanced oil recovery methods. Also includes the concept of phase behavior in each process. Petroleum and Geosystems Engineering 379 (Topic: Fundamentals of Enhanced Oil Recovery Techniques) and 379 (Topic 13) may not both be counted. Offered on the letter-grade basis only. Additional prerequisite: Upperdivision standing and Petroleum and Geosystems Engineering 323L (or 323) with a grade of at least C-.

#### Topic 15: E4: The Earth, Natural Resources, and Sustainability.

Application of logic, common sense, the fundamental laws of mass and energy conservation, as well as more advanced thermodynamics to evaluate overall efficencies of major human energy supply schemes such as fossil, nuclear, solar, wind, and biomass to define and quantify the irreversible linear processes and sustainable/unsustainable cycles. Petroleum and Geosystems Engineering 379 (Topic: E4: Earth, Environment, Energy) and 379 (Topic 15) may not both be counted. Offered on the letter-grade basis only. Additional prerequisite: Upperdivision standing; and credit with a grade of at least C- in each of the following: Chemistry 302, Mathematics 408C or 308K, Physics 303K, Petroleum and Geosystems Engineering 310, and 326.

**Topic 16: Hydraulic Fracture Design and Evaluation.** Overview of Formation evaluation; elasticity; in situ stress calculation and measurement; fracture initiation; basic equations of fracture mechanics; 2-and-3-dimensional fracture models; fluid rheology; proppant settling; pipe friction/surface pressure calculations; treatment pressure analysis; fracture diagnostics; fracturing from horizontal and deviated wells; and treatment design and completions. Petroleum and Geosystems Engineering 379 (Topic: Hydraulic Fracture Design and Evaluation) and 379 (Topic 16) may not both be counted. Offered on the letter-grade basis only. Additional prerequisite: Upper-division standing and Petroleum and Geosystems Engineering 334 (or 432) with a grade of at least C.

**Topic 17: Applied Subsurface Geology.** Principles and techniques for subsurface geologic interpretation, including subsurface mapping; construction of cross-sections; core description and analysis; stratigraphic interpretation of well logs; and stratigraphic and facies interpretation of seismic data. Petroleum and Geosystems Engineering 379 (Topic: Applied Subsurface Geology) and 379 (Topic 17) may not both be counted. Offered on the letter-grade basis only. Additional prerequisite: Geology 416M or 316P with a grade of at least C-.

# **Topic 18: Wellbore Mechanics and Managed Pressure Drilling.** Operational topics will draw from drilling fluids engineering; drilling system engineering; rig and wellbore hydraulics; ROP parameters and drilling optimizations; wellbore stability; fracture and pore pressure gradients; mud weight windows; in-situ and near-wellbore stress states; lost circulation; pressure control; pipe sticking; and other situations common to drilling operations. Petroleum and Geosystems Engineering 379 (Topic: Wellbore Mechanics and Managed Pressure Drilling) and 379 (Topic 18) may not both be counted. Offered on the letter-grade basis only. Additional prerequisite: Upper-division standing and Petroleum and Geosystems Engineering 430.

**Topic 19: Advanced Well Construction.** Focus on advanced topics in drilling fluids, cementing, hydraulics, managed pressure and dual gradient drilling, advanced well control and casing design, complex well design (DW, HPHT, Arctic), and well completions. Petroleum and Geosystems Engineering 379 (Topic: Advanced Well Construction) and 379 (Topic 19) may not both be counted. Offered on the lettergrade basis only. Additional prerequisite: Upper-division standing and Chemistry 302, Mathematics 408D, Petroleum and Geosystems Engineering 326, 430, Physics 303K, 103M.

**Topic 20: Drilling Engineering and Operations Management.** Restricted to non-petroleum engineering majors. A broad overview of the key elements of today's drilling engineering discipline, including an understanding of rigs and rig equipment, familiarity with drilling fluids, cementing, directional drilling techniques etc., up to understanding of casing design, well control and the application of new & emerging drilling and completion technologies. Petroleum and Geosystems Engineering 379 (Topic: 20) may not both be counted. Offered on the letter-grade basis only. Additional prerequisite: Mathematics 408D, Physics 303K, 103N, and Petroleum and Geosystems Engineering 326 with a grade of at least C-.

#### PGE 679H. Undergraduate Honors Thesis.

Research performed during two consecutive semesters under the supervision of an engineering faculty member; topics are selected jointly by the student and the faculty member with approval by the director of the Engineering Honors Program. The student makes an oral presentation and writes a thesis. Individual instruction for two semesters. Students pursuing both the Bachelor of Arts, Plan II, and a bachelor's degree in engineering may use this course to fulfill the thesis requirement for the Bachelor of Arts, Plan II. Prerequisite: For 679HA, enrollment in the Engineering Honors Program; for 679HB, Petroleum and Geosystems Engineering 679HA and enrollment in the Engineering Honors Program.

## **College of Fine Arts**

Douglas Dempster, PhD, Dean Andrew F. Dell'Antonio, PhD, Associate Dean for Undergraduate Studies Hunter C. March, PhD, Associate Dean for Arts Education D. Rachel Martin, BFA, Assistant Dean http://www.finearts.utexas.edu

## **General Information**

## Mission

The College of Fine Arts was established by the state legislature in 1937; in the decades since then, the college has grown with The University to become a leading center for arts study. Both students and faculty members of the College of Fine Arts have regularly received national and international recognition for their achievements; such recognition indicates the degree of academic and artistic excellence to which the college is dedicated.

The College of Fine Arts strives to prepare students for the practice, study, criticism, and teaching of the arts; to lead in developing the arts through research and the creation of new works; and to provide performances and exhibitions that deepen the understanding of the arts, expand audiences, and develop a better quality of life in the University, community, state, and nation. The college prepares students and audiences for the coming decades by emphasizing cultural diversity and technological advancement and by exploring the interrelationships among all the arts.

## Facilities

The Office of the Dean of the College of Fine Arts is located in the E. William Doty Fine Arts Building, at the corner of 23rd and Trinity streets. General inquiries about the college should be directed to this office. The mailing address is The University of Texas at Austin, Office of the Dean, College of Fine Arts, 2305 Trinity Street D1400, Austin TX, 78712.

Within the college are four academic units—the Department of Art and Art History, the Sarah and Ernest Butler School of Music, the Department of Theatre and Dance, and the School of Design and Creative Technologies. Inquiries about a particular unit should be directed to that unit.

## The Visual Arts Center

The Visual Arts Center (VAC) is a place where art exhibition and education intersect, drawing together a uniquely diverse community of students, faculty, guest artists, and creative voices from around the world. Situated in the Department of Art and Art History at The University of Texas at Austin, it provides pivotal exhibition and research space through five distinct galleries, and serves as a creative hub in UT's dynamic arts community.

For more information on the VAC's exhibitions and public programs, please visit http://www.utvac.org.

## **Texas Performing Arts**

Texas Performing Arts, one of the nation's most well-respected University-based arts centers, serves the campus and the Austin community at large through diverse offerings of world-class performances, educational activities, and collaborative campus and community partnerships.

Texas Performing Arts presents an international season of music, theatre, dance, and conversation as well as the best in touring Broadway

and concert attractions. As a University-based arts center, Texas Performing Arts also supports the academic mission of the College of Fine Arts by mentoring students, providing \$10 student tickets, and supporting the performance and research goals of faculty and staff members, particularly in the College of Fine Arts.

## **Computer Facilities**

In addition to the computer facilities available to all students at the University, the College of Fine Arts maintains facilities with special hardware and software for its own undergraduate and graduate majors. These include central laboratories and media-enhanced classrooms in each of the four academic units, and extensive wireless Internet coverage throughout the college.

Because of the rapidly growing importance of computers in College of Fine Arts curricula, students are strongly encouraged to come to the University with their own computers. In some programs of study, laptops are required. Students should contact the area of academic interest for more information.

## **Fine Arts Library**

Located on levels 3-5 of the E. William Doty Fine Arts Building, the Fine Arts Library provides a broad range of services and materials for students in art, theatre, dance, and music. It also houses The Foundry, a makerspace equipped with 3D printers, a powerful laser cutter, a vinyl printer cutter, mills, high-end Macs for writing video games, a collaborative video station, a virtual reality space, and a recording studio. Level 4 comprises class and seminar rooms as well as offices for the School of Design and Creative Technologies. For more information go to: https://www.lib.utexas.edu/about/locations/fine-arts.

Services include information and research assistance, instruction in getting the best from library databases including online and full-text journals, and circulation and reserves (for checking out items). The Fine Arts Library offers computing hardware and software to support the study of the fine arts. Students may borrow media equipment, including digital cameras, and reserve seminar and group study rooms. A high-end scanner is available. Carrels can be assigned to students seeking a specific location. A full range of support is provided for The Foundry's equipment. More details can be found here: https://www.lib.utexas.edu/foundry.

The art collection includes materials on most art and design movements and schools, photography, and art education. Artists of most periods and nationalities and studies of their work are represented, as are most media and techniques. Art works on display include a large pre-Columbian pottery collection and modern prints. The digital image collection contains over 90,000 images from art, architecture, the performing arts, and fashion, and is accessible, with a UT EID, at https:// dase.laits.utexas.edu/collections.

The music collection includes materials on performance, composition, history, ethnomusicology, music education, and music therapy. Most historical periods and geographical areas are covered in both classical and popular idioms, and while the emphasis is on the Western classical tradition, many other musics are represented. Tens of thousands of scores are available for both study and performance. A streaming audio service with access to over 10 million tracks is available, and students can stream movies, documentaries, and musical performances via the Library Catalog, at http://catalog.lib.utexas.edu/.

The theatre and dance collection includes materials on performance, especially play production, theatrical design, playwriting, theatre education, and dance. Materials on other types of theatrical presentations, such as magic, circuses, and pantomime, are also included. The Fine Arts Library holds texts of major plays written in English or translated into English, with contemporary plays collected most heavily. The Perry-Castañeda Library also holds texts of plays in English and other languages, with emphasis on plays as a literary form and on literary criticism.

While the collection of media materials such as CDs and DVDs is held elsewhere, items can be requested via the Library Catalog. Newly added media are housed in the Fine Arts Library.

The Fine Arts Library is open 75-80 hours per week during the long semesters and offers both collaborative student spaces as well as a whole floor devoted to quiet study.

Special collections include materials from the Austin Theatre Alliance -Paramount and State Theatres, and the Historical Music Recordings Collection, which includes over 300,000 items in older formats such as 78rpm and LP records, and open-reel tapes.

## Financial Assistance Available through the College

Students in the College of Fine Arts are eligible for a variety of scholarships and awards. Most scholarship aid in the college is offered through the academic units (art and art history, design and creative technologies, music, and theatre and dance). For information about scholarship procedures and deadlines, the student should contact the academic unit of interest.

## **Student Services**

## Office of the Dean, Student Affairs

In the College of Fine Arts, the Office of the Dean, Student Affairs offers a variety of student services, including general academic advising, maintenance of student records, evaluation of the student's academic standing and progress toward a degree, and information about transfer and study abroad credit evaluation. Students should contact the Office of the Dean, Student Affairs for answers to questions about degree requirements or other College of Fine Arts or University policies and regulations. This office is also a good source of general information and referral.

## **Academic Advising**

Each academic unit in the college (art and art history, design and creative technologies, music, and theatre and dance) has an undergraduate advising office with a faculty advising coordinator and one full-time staff adviser. Questions about advising policies and procedures should be directed to those offices.

A student enrolled in the College of Fine Arts is required to meet with a designated adviser before registering for any semester or summer session. This meeting must take place during the official advising period, and the student's proposed schedule of classes must be approved by the adviser. Subsequent changes or corrections in the schedule must also have the adviser's approval.

## **Career Services**

## **Career Advising**

Fine Arts Career Services, a division of the Office of the Dean, helps fine arts majors explore career options, plan for careers, and develop strategies for seeking jobs upon graduation. More information is available at https://finearts.utexas.edu/careers. Career advising and planning services are also available from the Sanger Learning and Career Center in Jester Center and the Vick Center for Strategic Advising and Career Counseling in the School of Undergraduate Studies. The University makes no promise to secure employment for each graduate.

## **Education Career Services**

Candidates for teacher certification should register with Education Career Services at the beginning of their student-teaching semester. Education Career Services provides job placement services in educationrelated occupations at the elementary school, secondary school, and college level. Additional information is available on the Education Career Services website at https://education.utexas.edu/about/college-offices/ career-services.

## **Student Organizations**

In each of the units of the College of Fine Arts are various student organizations, including honor societies, professional associations, and service organizations. For information about current organizations and their eligibility requirements, contact the appropriate unit.

The Fine Arts Council is the official student organization of the college.

## **Study Abroad**

The University offers many opportunities for students to study abroad. Among these is the Learning Tuscany program, which offers arts instruction by University faculty members at the Santa Chiara Study Center in Castiglion Fiorentino, near Florence. Students take both studio art and art history courses and focus on the culture of central Italy, through class time and numerous field trips to nearby cities. More information is available from the undergraduate advising office in the Department of Art and Art History.

Casa Herrera is a research, conference, and teaching facility located in the heart of Antigua, Guatemala, operated by the Department of Art and Art History. As an extension of the department's Mesoamerica Center, Casa Herrera focuses on the varied and inter-related disciplines that contribute to the study of Pre-Columbian art, archeology, history, and culture.

The Butler School of Music offers an opera program in Salzburg, Austria. More information is available from the undergraduate advising office in the Butler School of Music.

Maymester Abroad courses in fine arts are offered for five weeks in May and June. More information is available from the Study Abroad Office at http://world.utexas.edu/abroad.

## **Admission and Registration**

## Admission

Admission and readmission of undergraduate students to the University is the responsibility of the director of admissions. Information about admission to the University is given in *General Information* (http://catalog.utexas.edu/general-information/admission).

Within the College of Fine Arts, departmental admissions coordinators and dean's office staff provide assistance to students who plan to attend the University. For information about a particular academic area, prospective students should contact the director of Fine Arts admissions or the specialized admissions coordinator in the Department of Art and Art History, the School of Design and Creative Technologies, the Butler School of Music, or the Department of Theatre and Dance. Current The University of Texas at Austin students should consult the College's academic advisers for answers to questions about degree requirements and steps for internal transfer. Because of the variety of degree options available in the college, prospective students are encouraged to visit the campus to attend a College of Fine Arts Information Session or meet with a College of Fine Arts admissions coordinator. An appointment should be arranged in advance.

## **Admission Policies of the College**

To major in any field in the College of Fine Arts, a student must be admitted to the University. Most majors in the college are restricted majors that require the approval of faculty admissions committees within the college and special requirements for application.

#### **Department of Art and Art History**

To major in the Department of Art and Art History, a student must have the approval of the Art and Art History Admissions Committee. Some majors require a portfolio submission. Information about admission requirements, procedures, and deadlines is available from the undergraduate admissions office in the department or online at http:// art.utexas.edu.

## School of Design and Creative Technologies

Admission to programs in the School of Design and Creative Technologies requires the approval of the Design and Creative Technologies Admissions Committee. Some majors require a portfolio submission. Information about admission requirements, procedures, and deadlines is available from the undergraduate admissions office in the department or online at https://designcreativetech.utexas.edu/ admissions/freshman-admissions.

### Sarah and Ernest Butler School of Music

To major in music, a student must pass an audition conducted by the Butler School of Music. At the discretion of the school, a student who fails an audition may be allowed to reaudition at a later date. Information about audition requirements, procedures, dates, and deadlines is available from the undergraduate admissions office in the Butler School or online at https://music.utexas.edu/apply/undergraduate-admission.

#### **Department of Theatre and Dance**

Admission to programs in the Department of Theatre and Dance requires the approval of the Theatre and Dance Admissions Committee. Some majors require an audition, interview or portfolio submission. Information about admission requirements, procedures, and deadlines is available from the undergraduate admissions office in the department or online at http://theatredance.utexas.edu.

## Transfer

#### **Internal Transfer**

A student may transfer from another division of the University to the College of Fine Arts in accordance with the procedures and policies given in *General Information* (http://catalog.utexas.edu/general-information/ registration-tuition-and-fees/transfer-from-one-division-to-another-within-the-university). However, a student seeking admission to any department of the college must also satisfy the special admission requirements described above.

#### **External Transfer**

A student who begins study in the fine arts at another institution should consult the Fine Arts' director of admissions or the admissions coordinator for the respective department or school before applying to the University. Transfer applicants must also satisfy the special admissions requirements described above.

#### **Transfer Credit Evaluation**

Most credit accepted from another college or university is evaluated by the Office of Admissions to determine equivalent courses at The University of Texas at Austin. For some transferred courses, especially in the fine arts, credit is accepted but no specific University equivalency is assigned. If, for example, a student has completed 12 semester hours of transferable coursework in studio art at another institution, the Office of Admissions may accept the work only as 12 semester hours of unspecified credit in art. The same will often be true for courses in theatre and dance and music.

Unspecified transfer credit outside the student's major is evaluated by the Office of the Dean, Student Affairs during the degree audit process described in the Degree Audit (p. 276) section. For unspecified transfer credit within the student's major, however, the student must seek a transfer evaluation from the designated adviser in art and art history, music, theatre and dance, or design and creative technologies. The adviser will identify courses in the major that are equivalent to University courses and forward his or her written recommendation to the Office of the Dean, Student Affairs.

Transfer credit in music performance may not be counted toward a degree in music until the student has completed additional music performance coursework at the University.

## Registration

*General Information* (http://catalog.utexas.edu/general-information/ registration-tuition-and-fees) gives information about registration, adding and dropping courses, transfer from one division of the University to another, and auditing a course. The *Course Schedule* (https:// registrar.utexas.edu/schedules), published each semester and summer session, includes registration instructions, advising locations, and the times, places, and instructors of classes. The *Course Schedule* and *General Information* are published on the registrar's Web site, http:// registrar.utexas.edu/.

## **Approvals Required**

Before registering for any semester or summer session, a student in the College of Fine Arts must obtain written approval of the proposed schedule of classes from his or her designated adviser.

## Prerequisites

The student must also meet the prerequisite for each course in which he or she enrolls. Prerequisites are given in the relevant catalog section and often appear in the *Course Schedule*. A student who registers for or adds a class without having met the prerequisite may be dropped from the class.

## **Fine Arts Registration Requirements**

In addition to individual course prerequisites, there are special registration requirements for certain courses and areas of study in the College of Fine Arts.

#### Sarah and Ernest Butler School of Music

- 1. A student with transferred college credit in music theory must take a diagnostic examination in music theory. The results of the examination determine the level of music theory for which the student is advised to register.
- 2. Before beginning upper-division coursework in the major instrument, students majoring in music performance (including those pursuing the pedagogy option) must pass a full faculty jury examination in the major instrument and must be admitted to upper-division standing in that instrument.
- 3. Before beginning upper-division coursework in the major area, a student majoring in composition or music studies must obtain the

approval of a designated committee composed of faculty members from that major.

- 4. Fulfillment of the music performance requirement signifies the attainment of a given level of artistic performance, rather than the completion of a specific number of semester hours of credit. At the discretion of the faculty, a student may be required to repeat any course in music performance; in such a case, the course may be repeated for credit. No music performance requirement is fulfilled unless approval of the faculty has been obtained.
- 5. A student who receives a grade lower than a *C* in any music performance course may not register for that course during the next semester or summer session until the requests of other students for such work have been met.
- 6. A student in a degree other than music studies or the Bachelor of Arts in Music degree, whose degree plan requires a piano proficiency of Music 210K, must continue with group piano classes in consecutive semesters until the requirement is fulfilled. The student may not enroll in private instruction until the Music 210K proficiency has been completed. A student in music studies, whose degree plan requires piano proficiency demonstrated in Music 201F (Piano for Teachers), must successfully complete Music 201F before being admitted to upper-division coursework in music studies. Students in the Bachelor of Arts in Music degree program must successfully complete the piano proficiency of Music 201N.

## **Department of Theatre and Dance**

A student must enroll in an appropriate production or performance laboratory course, under the supervision of a Department of Theatre and Dance faculty member, in any semester he or she wishes to participate in a production sponsored by the department. A student majoring in the Department of Theatre and Dance must consult his or her adviser to determine the appropriate course. Nonmajors who wish to enroll in production or performance laboratory courses must consult the undergraduate advising office of the department.

## Academic Policies and Procedures

## **Academic Standards**

## **Class Attendance and Absences**

Regular and punctual attendance is required at all classes, laboratories, practice hours, and other activities for which the student is registered.

Absences from scheduled practice hours, rehearsals, and laboratories will be excused only for serious and substantiated reasons, and the final grade in the course may be lowered for unexcused absence. Absence from a theatre, dance, or music rehearsal, crew meeting, or performance may be deemed sufficient reason for giving the student a grade of F for the semester's work in the course concerned.

If an instructor indicates that a student has fallen below a passing grade in a course because of excessive absences, the dean, upon written recommendation of the instructor, may drop the student from that course and assign a grade of *F* for the semester.

## **Special Regulations of the College**

#### **Personal Computing Devices**

Undergraduate majors in the Department of Art and Art History and the School of Design and Creative Technologies must provide their own portable computing devices and software suitable for use in the classroom and for completing course assignments. Information about specific technical requirements is available from the departmental undergraduate advising office.

## **Studio Courses**

Students retain copyright to all two-dimensional, three-dimensional, timebased, and electronic artwork created in the Department of Art and Art History; they grant a nonexclusive license to exhibit, display, reproduce, perform, or adapt these works at the discretion of the faculty. Works left in any departmental facility at the end of any semester or summer session may be removed or destroyed at the discretion of the faculty.

## Design and Arts and Entertainment Technologies Courses

Students retain copyright to all two-dimensional, three-dimensional, timebased, digital, and electronic artwork created in the School of Design and Creative Technologies; they grant a nonexclusive license to exhibit, display, reproduce, perform, or adapt these works at the discretion of the faculty. Works left in any departmental facility at the end of any semester or summer session may be removed or destroyed at the discretion of the faculty.

#### **Music Performances**

A student majoring in the Butler School of Music must consult his or her faculty adviser before participating in any public performance.

## Honors

## **University Honors**

The designation University Honors, awarded at the end of each longsession semester, gives official recognition and commendation to students whose grades for the semester indicate distinguished academic accomplishment. Both the quality and the quantity of work done are considered. Criteria for University Honors are given in *General Information* (http://catalog.utexas.edu/general-information/academicpolicies-and-procedures/honors/#universityhonorstext).

## **Graduation with University Honors**

Students who, upon graduation, have demonstrated outstanding academic achievement are eligible to graduate with University Honors. Criteria for graduation with University Honors are given in *General Information* (http://catalog.utexas.edu/general-information/academicpolicies-and-procedures/honors/#graduationwithuniversityhonorstext).

## **Special Honors in Art History**

The Honors Program in Art History gives outstanding art history majors an opportunity to undertake an advanced research and writing project under the supervision of a faculty member. The notation "Special Honors in Art History" appears on the transcript of each graduate who completes the program.

#### Admission to the Program

The honors program is available to qualified art history majors pursuing the degree of Bachelor of Arts. At the beginning of the senior year (or second semester of the junior year), an interested art history major should apply to the honors adviser for admission to the program. The criteria for admission are

- 1. Completion of at least 90 semester hours of college credit.
- 2. A university grade point average of at least 3.00.
- 3. A grade point average of at least 3.50 in all art history courses attempted, both at the University and elsewhere.

- Completion of at least 15 semester hours in art history. If the hours in art history were not earned at the University, admission is at the discretion of the honors adviser.
- 5. Approval of the honors adviser, who is responsible for maintaining the high standards for admission to and completion of the program.

## **Graduation with Special Honors in Art History**

To complete the program, students must meet the following requirements by the end of the semester in which they graduate.

- 1. Graduation as an art history major.
- 2. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree.
- 3. A university grade point average of at least 3.00.
- 4. A grade point average of at least 3.50 in all art history courses taken at the University.
- 5. Completion of Art History 375 with a grade of at least B.
- 6. Approval of the honors adviser.
- 7. Completion of Art History 379H with a grade of *A*. This conference course, in which the student researches and writes a thesis, may not be counted toward the minimum number of hours of art history required for the degree.

To enroll in Art History 379H, the student must have the consent of the honors adviser. Consent is based on a written prospectus for the student's honors thesis and notification of support from the art history faculty member who will supervise the thesis. The prospectus and the notification of support must be submitted to the honors adviser by the end of the semester preceding the semester in which the student plans to take Art History 379H.

The student may develop the honors project and prepare the prospectus either in Art History 376 or in another art history course:

- a. With the approval of the honors adviser, the student must complete the independent study course Art History 376 with an art history faculty member who agrees to supervise the student's work. Art History 376 may be counted toward the degree as elective art history credit. The student must earn a grade of at least *B* in order to progress to Art History 379H.
- b. The student may also base the prospectus on a project undertaken in another art history course in which he or she earned a grade of at least *B*.
- 8. Submission of a departmental honors degree audit application to the Office of the Dean of the College of Fine Arts. This degree audit application may be submitted when the student is admitted to the honors program; it must be on file when the student applies for graduation. Failure to meet this requirement will preclude graduation with special honors in art history.

## **Special Honors in Theatre and Dance**

The Honors Program in Theatre and Dance gives outstanding theatre and dance majors an opportunity to undertake an advanced research and writing project under the supervision of a faculty member. The notation "Special Honors in Theatre and Dance" appears on the transcript of each graduate who completes the program.

#### Admission to the Program

The honors program is available to qualified theatre and dance majors pursuing the degree of Bachelor of Arts in Theatre and Dance. At the beginning of the junior year, an interested theatre and dance major should apply to the honors adviser for admission to the program. The criteria for admission are

- 1. Completion of at least 60 semester hours of college credit.
- 2. A university grade point average of at least 3.30.
- 3. A grade point average of at least 3.60 in all theatre and dance courses attempted in residence.
- 4. Completion of at least 15 semester hours in theatre and dance. If the hours in theatre and dance were not earned at the University, admission is at the discretion of the head of the Theatre and Dance Honors program or a designate.
- 5. Approval of the head of the Theatre and Dance Honors program or a designate, who is responsible for maintaining the high standards for admission to and completion of the program.

## Graduation with Special Honors in Theatre and Dance

To complete the program, students must meet the following requirements by the end of the semester in which they graduate.

- 1. Graduation as a theatre and dance major.
- 2. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree.
- 3. A university grade point average of at least 3.30.
- 4. A grade point average of at least 3.60 in all theatre and dance courses taken at the University.
- 5. Completion of Theatre and Dance 375H with a grade of at least B.
- 6. Approval of the head of the Theatre and Dance Honors program or a designate.
- 7. Completion of Theatre and Dance 379H with a grade of *A*. This is a conference course, in which the student researches and produces a thesis. To enroll in Theatre and Dance 379H, the student must have the consent of the head of the Theatre and Dance Honors program or a designate. Consent is based on a written prospectus for the student's honors thesis and a letter of support from the theatre and dance faculty member who will supervise the thesis. The prospectus and the letter of support must be submitted to the head of the Theatre and Dance Honors program or a designate by the end of the semester preceding the semester in which the student plans to take Theatre and Dance 379H. The student may develop the honors project and prepare the prospectus either in Theatre and Dance 376H or in another theatre and dance course:
  - a. With the approval of the head of the Theatre and Dance Honors program or a designate, the student must complete the independent study course Theatre and Dance 376H with a theatre and dance faculty member who agrees to supervise the student's work. Theatre and Dance 376H may be counted toward the degree as elective theatre and dance credit. The student must earn a grade of at least *B* in order to progress to Theatre and Dance 379H.
  - b. The student may also base the prospectus on a project undertaken in another theatre and dance course in which he or she earned a grade of at least *B*.
- 8. Submission of a departmental honors degree audit application to the Office of the Dean of the College of Fine Arts. This degree audit application may be submitted when the student is admitted to the honors program; it must be on file when the student applies for graduation. Failure to meet this requirement will preclude graduation with special honors in theatre and dance.

## **Recognition in Music Performance**

This recognition is offered to encourage undergraduate music students who are not music performance majors to pursue the intensive study of their instrument beyond the minimum requirements for their degree.

### Eligibility

To apply for a Recognition in Music Performance, a student must be enrolled as an undergraduate music major pursuing the Bachelor of Music degree or the Bachelor of Arts in Music degree. He or she must be enrolled in principal instrument course 260.

### Procedure

A student who meets the eligibility criteria must submit a petition to the appropriate music performance jury for permission to audition before the Butler School of Music faculty—that is, to perform at a full faculty jury examination. This petition may be submitted during any semester in which the student is enrolled in principal instrument course 260. Ordinarily, the student may not audition for the full faculty before the conclusion of his or her second semester of principal instrument course 260. If the petition is approved, the student may audition at a full faculty jury examination.

If the student obtains approval at the full faculty jury examination, then he or she must present a recognition recital during the following academic year. The student may also enroll in Music 420R rather than principal instrument course 260 for the semester in which the recognition recital is to be given. A recognition recital must be equivalent to the junior recital required of a performance major and must offer a repertoire equivalent to that of an upper-division performance major. The recital is heard by the faculty of the student's principal instrument, who vote to approve or disapprove the granting of Recognition in Music Performance. If approval is given by the division faculty, the recognition is issued by the Butler School and signed by both the student's music performance instructor and the director of the school.

## Graduation

## **Special Requirements of the College**

All students must fulfill the general requirements (p. 20) for graduation. Students in the College of Fine Arts must also fulfill the following requirements.

## Residence

See the University-wide general requirements (p. 20) on coursework to be taken in residence. Unless an exception is approved by the adviser and the dean, a student in the College of Fine Arts must also complete in residence the last 18 semester hours in the major subject that are counted toward the degree.

## **Grade Point Average**

All University students must have a grade point average of at least 2.00 to graduate. In addition, students in the following majors must meet special grade point requirements.

## **Studio Art**

A student majoring in studio art must have a grade point average of at least 2.50 for all upper-division studio art courses taken in residence at the University.

### **Art History**

A student majoring in art history must have a grade point average of at least 2.50 for all upper-division art history courses taken in residence at the University.

#### Design

A student majoring in design must maintain a cumulative grade point average of at least 2.50 for all upper-division design courses taken in residence at the University.

## **Bachelor of Arts in Music**

A student pursuing the Bachelor of Arts in Music must have a grade point average of at least 2.50 in all upper-division courses in the Butler School of Music (excluding ensemble) taken in residence at the University.

### **Bachelor of Arts in Theatre and Dance**

A student pursuing the Bachelor of Arts in Theatre and Dance must have a grade point average of at least 2.50 in all upper-division courses in the Department of Theatre and Dance.

## Butler School of Music Special Requirements Ensemble Requirement

Ensembles that may be used to fulfill the following requirements are designated by the Butler School. For information, the student should contact the undergraduate advising office of the school. With the approval of the designated adviser, a student may enroll in more than one ensemble in a semester, but no more than one ensemble a semester may be used to fulfill this requirement.

#### **Bachelor of Music**

Students seeking the Bachelor of Music other than music studies must complete in residence at least eight long-session semesters of approved ensemble. Transfer students must complete an approved ensemble each long-session semester in residence until they have met the ensemble requirement or until they graduate, whichever comes first. A transfer student may count toward this requirement two semesters of transferred ensemble approved by the Butler School.

Students majoring in music studies must complete in residence at least six long-session semesters of approved ensemble.

#### **Bachelor of Arts in Music**

Students seeking this degree must complete in residence at least four long-session semesters of ensemble approved by the Butler School. Transfer students must complete an approved ensemble each longsession semester in residence until they have completed four semesters of ensemble or until they graduate, whichever comes first. A transfer student may count toward this requirement one semester of transferred ensemble approved by the Butler School.

## **Recital Requirement for Music Studies Majors**

Before the end of his or her last semester of study on the principal instrument, a music studies major must present either the recital required for Recognition in Music Performance (p. 274) or a community performance approved by the music studies faculty and the student's instructor in the principal instrument.

## **Degree Audit**

At registration periods, each student normally receives an advising audit that summarizes his or her progress toward a degree. An official degree audit, however, is the required statement from the Office of the Dean, Student Affairs of the student's official standing in a College of Fine Arts degree program.

Official degree audits are reviewed by the Office of the Dean, Student Affairs for students with a major in the College of Fine Arts. If a student changes his or her catalog, principle instrument, major, or any degree option that affects the requirements of his or her degree program, a new official degree audit will be generated and reviewed.

The official degree audit provides an accurate statement of the requirements, but the student is responsible for meeting all deadlines, knowing the requirements, and registering for courses that fulfill all the requirements for the degree as stated in a catalog under which he or she is entitled to graduate. Before registering, the student should seek an official ruling from the Office of the Dean, Student Affairs if in doubt about any requirement.

## **Applying for Graduation**

In the semester or summer session in which the degree is to be conferred, the candidate must be registered at the University and must file a graduation application form with the Office of the Dean, Student Affairs. This should be done at the beginning of the semester in which the student intends to graduate; it must be done by the deadline to apply for an undergraduate degree, which is given in the official academic calendar. No degree will be conferred unless the graduation application form has been filed on time.

An official degree audit must be on file when the student submits the graduation application. Because the application process includes a review of all remaining degree requirements, candidates for graduation are encouraged to apply as early in the semester as possible. A student who applies for graduation but does not receive the degree must submit a new application in the semester he or she subsequently intends to graduate.

The student must be registered at the University for the semester or summer session in which the degree is to be granted. This requirement may be fulfilled by registering for courses in residence or by registering in absentia. For information about registration in absentia, the student should consult the Office of the Dean, Student Affairs no later than the second week of the semester in which he or she intends to graduate.

Credit received by examination, correspondence, or transfer does not fulfill the residence requirement. Students planning to receive credit by any of these means must consult the Office of the Dean, Student Affairs before the semester in which they intend to graduate for a ruling about whether the credit may be applied toward the degree and for information about the procedures and deadlines involving credit by examination, correspondence, and transfer.

No degree will be conferred unless all requirements have been fulfilled and all deadlines met.

## **Degrees and Programs**

## **Degrees Offered**

The College of Fine Arts offers a wide variety of degree programs. For undergraduate students who seek professional training in the arts or who feel the need for intensive training in their chosen art, the college offers the degrees of Bachelor of Fine Arts, Bachelor of Music, and Bachelor of Science in Arts and Entertainment Technologies. These degrees require that approximately two-thirds of the coursework be completed in the major area. The student who wants a broad education with an emphasis in the arts may pursue the degree of Bachelor of Arts, Bachelor of Arts in Music, or Bachelor of Arts in Theatre and Dance. These degrees require that approximately a third of the coursework be completed in the major area.

## **Department of Art and Art History**

The Department of Art and Art History offers academic programs in visual art studies, art history, and studio art.

### **Visual Art Studies**

Art educators believe that art is an essential component of a comprehensive education. The art education/visual art studies program prepares students to serve as teaching artists in schools and community settings. Comprehensive coursework examines the grounding of the field (philosophical, historical and social contexts), current art education trends (visual/material culture art education, social justice art education, multicultural art education, discipline-based art education), content knowledge (age appropriate art making skills, art criticism, aesthetics, educational philosophy, educational technology, ethical decision making) and pedagogical strategies (curriculum writing, teaching strategies, standards and evaluation). Field observations and practical classroom teaching in community and school environments are required of all students in our program. Coursework meets the state requirements for teacher certification in all-level (early childhood through grade 12) art.

## Art History

The study of art history embraces a wide range of objects: paintings, drawings and prints of all kinds, photographs and film; sculpture; buildings and their grouping into towns and cities; graves and tombs; gardens; books and manuscripts; objects made of precious stones and metals; performance; in short, all visual and material culture. There is a wide range of art history instruction in ancient, medieval, Renaissance, baroque, modern, and contemporary art, as well as in the art from various regions of the world, and cultures that can broadly be described as African, Asian, Islamic, Central and Latin American, Mesoamerican, Native American, and Oceanic.

## Studio Art

The purpose of the studio art program is to transmit a professional, solid foundation of skills in a wide range of studio practices by providing students with experiences in historical and theoretical models and by providing a vocabulary to understand and engage in art's critical discourse. Studio art instruction is given in drawing and painting (contemporary and historical practices), photography and media (black/white darkroom, digital, still and moving image), print (intaglio, lithography, serigraphy), sculpture and extended media (casting, hot and cold fabrication, digital fabrication, installation), and transmedia (digitaltime art, video art, performance art). Through an exploration of the ideas and forms at the leading edge of knowledge, our students develop the capacity for experimentation and invention to create new forms of studio art.

The University's extensive resources for art research include the Fine Arts Library, the Blanton Museum of Art, the Perry-Castañeda Library, and specialized collections such as the Harry Ransom Center, the Classics Library, the Architecture and Planning Library, the Benson Latin American Collection, and the University Co-op Materials Lab.

#### **Programs of study**

Programs of study leading to the following undergraduate degrees are offered in the Department of Art and Art History:

- Bachelor of Arts
  - Art history
  - Studio art
- Bachelor of Fine Arts
  - Studio art
  - Visual art studies
    - Students who plan to pursue certification to teach art in Texas public schools should follow the visual art studies (VAS) program.

## Sarah and Ernest Butler School of Music

Through professional education of the highest caliber, the Butler School of Music prepares students for productive careers as performers, teachers, composers, and scholars, and for satisfying lives as informed and responsible members of a democratic society. In accordance with the University's mission, the School also seeks to extend the boundaries of knowledge and human experience through research and the creation of new music.

Housed in two connected buildings, the physical facilities of the Butler School include performance spaces in the 700-seat Bates Recital Hall with its world-renowned Visser-Rowland pipe organ, Jessen Auditorium, Recital Studio, and McCullough Theatre. For special events, the school collaborates with Texas Performing Arts for performances in Bass Concert Hall. Other facilities include well-equipped classrooms and faculty studios/offices, multiple large and small rehearsal halls, electronic music studios, recording studios, 130 practice rooms and modules (including dedicated rooms for organ, harp, and percussion), a technology lab, chamber music rooms, two digital keyboard labs, and 250 well-maintained pianos. Also available to music students are libraries including manuscripts, rare editions, and performance collections; a Medieval and Renaissance instrument collection; a Javanese gamelan, and a Music Learning Laboratory.

## **Programs of study**

Programs of study leading to the following undergraduate degrees are offered in the Butler School of Music:

- Bachelor of Arts in Music
  - Emphasis in Music
  - Emphasis in Composition
- Bachelor of Music
  - Composition
  - Jazz
    - Concentration in Performance: double bass, drum set, guitar, piano, saxophone, trombone, and trumpet
    - Concentration in Composition: double bass, drum set, guitar, piano, saxophone, trombone, and trumpet
  - *Performance*: voice, piano, organ, harp, harpsichord, and orchestral instruments
  - Music studies
    - Students who plan to pursue certification to teach music in Texas public schools should follow the Music Studies program.

## **Department of Theatre and Dance**

The Department of Theatre and Dance affords students opportunities for scholarship and practice in all the principal areas of theater and dance. Students may choose programs of study leading to a variety of academic and professional goals, including teacher certification in both theater and dance. The facilities of the department are among the best available to university programs in the United States. In addition to the performance areas, studios, and shops of Texas Performing Arts, the department has the B. Iden Payne Theatre, the Oscar Brockett Theatre (a flexible space black box theater), a 100-seat laboratory theater, two workshop performance spaces, an extensive costume collection, five dance studios, a drafting studio, a design studio, as well as numerous classrooms and rehearsal studios in the F. Loren Winship Drama Building. Of special interest to students pursuing theater research is the Performing Arts Collection, housed in the Harry Ransom Humanities Research Center, which contains one of the world's most important collections of theatre material.

## Programs of study

Programs of study leading to the following undergraduate degrees are offered in the Department of Theatre and Dance:

- · Bachelor of Arts in Theatre and Dance
  - Theatre and dance
- Bachelor of Fine Arts
  - Acting
  - Dance
    - Students who plan to pursue certification to teach dance in Texas public schools should follow the dance studies option under the dance program.
  - Theatre studies
    - Students who plan to pursue certification to teach theater arts in Texas public schools should follow the theater studies program.

## School of Design and Creative Technologies

The School of Design and Creative Technologies offers academic programs in design and arts and entertainment technologies.

#### Design

The undergraduate design program empowers students with a rich, multi-faceted educational experience that poises graduates for careers in the design professions or an entrepreneurial endeavor. Design is about solving a problem and creating new processes, products, and services for people. It is human-centered; the end-user's needs, wants, and limitations are explored at all stages within the design process and development lifecycle.

Students enjoy the extensive offerings of one of the world's great public universities, while receiving individualized instruction from expert, passionate faculty and local industry professionals in small cohorts of approximately 20 students. Students immerse themselves in various aspects of design and learn to create graphics, objects, interactions, systems, and services.

## Arts and Entertainment Technologies

Arts and Entertainment Technologies enables students to explore digital arts and media production in multiple emphases. Faculty noted for their professional excellence and experience teach a diverse set of courses that engage game and mobile application development, music and sound technologies, and contemporary live-performance technologies. Students work with faculty and each other to produce state-of-the-art content in an interdisciplinary academic setting firmly aligned with the missions of both the College of Fine Arts and The University of Texas.

Instruction is given in coding, game development, 2-D/3-D rendering, game scripting, sound synthesis, sampling, music programming, film and game scoring, live interactive staging, motion tracking and intelligent lighting. Through this curriculum, students are prepared to create

digital content, lead production teams and develop new applications of technology in the evolving entertainment industries.

## **Programs of study**

Programs of study leading to the following undergraduate degrees are offered in the School of Design and Creative Technologies:

- Bachelor of Arts
- Design
- Bachelor of Fine Arts
  - Design
- Bachelor of Science in Arts and Entertainment Technologies
   Arts and entertainment technologies

## Applicability of Certain Courses Physical Activity Courses

Physical activity courses (PED) are offered by the Department of Kinesiology and Health Education. A limited number of these courses may be counted as electives toward degrees in the College of Fine Arts, but only at the discretion of the dean. All physical activity courses are counted among courses for which the student is enrolled, and the grades are included in the grade point average. For further information, contact the Office of the Dean, Student Affairs.

## **Bible Courses**

Bible courses may be counted as lower-division electives in College of Fine Arts degree programs that have room for such electives. No more than 12 semester hours of such work may be counted toward any degree offered by the University.

## Courses Taken on the Pass/Fail Basis

Regulations concerning courses taken on the pass/fail basis are given in *General Information* (http://catalog.utexas.edu/general-information). For most degree programs in the College of Fine Arts, a very limited and restricted amount of coursework may be taken on the pass/fail basis. To be assured that a course taken on this basis will apply to the degree, the student must consult the Office of the Dean, Student Affairs before enrolling in the course.

## Credit by Examination, Correspondence, and Transfer

Credit that a student in residence earns by examination, correspondence, or extension will not be counted toward a degree in the College of Fine Arts unless specifically approved in advance by the dean.

Credit that the student earns at another institution while enrolled in residence at the University also will not be counted toward a degree in the college unless approved in advance by the dean.

A student planning to take coursework at another institution while not enrolled in residence at the University should also seek a ruling from the Office of the Dean, Student Affairs as to whether the credit may be applied toward a degree and for information about procedures and deadlines. This ruling should be obtained before registering for the coursework.

No more than 10 percent of the semester hours required for any degree offered in the College of Fine Arts may be completed by correspondence.

## **UTeach-Fine Arts Teacher Certification**

To be recommended for a certificate to teach in Texas public schools, an undergraduate or graduate student must complete a University of

Texas at Austin approved program for teacher preparation (p. 16). The University maintains approved programs for visual arts, theatre arts, dance, and music. Students interested in one of these teaching areas ordinarily pursue the degree program in fine arts education: visual art studies (p. 280), theatre studies (p. 280), dance (p. 280), or music studies (p. 283). Students seeking teacher certification must be approved by the College of Education for the Professional Development Sequence (PDS) and must complete additional state exams and fingerprinting requirements. See State Board for Educator Certification (SBEC) at http://www.tea.texas.gov for details. Field observations and practical classroom teaching in community and school environments are required of all students in the program. Coursework meets the state requirements for teacher certification in all-level (early childhood through grade 12) art, music, or theatre and in secondary (grades six through 12) dance.

State of Texas teacher certification requirements are governed by the Texas Education Agency and are subject to change. Students must adhere to current teacher certification requirements, even if they differ from those listed in the University catalogs.

## **Professional Development Sequence**

## For those seeking certification for visual art studies, all-level:

Requirements		Hours	
EDC 331S	School Organization and Classroom Management in Secondary Schools		3
EDC 332S	Designs for Instruction		3
EDC 370S	Secondary School Subjects		3
EDC 951W	All Level Teaching Practicum (Topic 2)		9
PSY 301	Introduction to Psychology		3
ALD 322	Individual Differences		3
Three credit hours in hur following:	nan development chosen from the		3
PSY 304	Introduction to Child Psychology		
PSY 309	Personality		
HDF 313 & HDF 113L	Child Development and Child Development Laboratory		
EDP 350G	Adolescent Development		

## For those seeking certification for theatre studies, all-level:

Requirements		Hours	
EDC 331S	School Organization and Classroom Management in Secondary Schools		3
EDC 332S	Designs for Instruction		3
EDC 370S	Secondary School Subjects		3
EDC 951W	All Level Teaching Practicum (Topic 1)		9
PSY 301	Introduction to Psychology		3
ALD 322	Individual Differences		3
Three credit hours in hum following:	nan development chosen from the		3
PSY 304	Introduction to Child Psychology		
PSY 309	Personality		
HDF 313	Child Development		
& HDF 113L	and Child Development Laboratory		
EDP 350G	Adolescent Development		

## For those seeking certification for dance studies, secondary:

Requirements		Hours	
EDC 331S	School Organization and Classroom Management in Secondary Schools		3
EDC 332S	Designs for Instruction		3
EDC 370S	Secondary School Subjects		3
EDC 951W	All Level Teaching Practicum (Topic 3)		9
PSY 301	Introduction to Psychology		3
ALD 322	Individual Differences		3
Three credit hours in human development chosen from the following:			3
PSY 304	Introduction to Child Psychology		
PSY 309	Personality		
HDF 313 & HDF 113L	Child Development and Child Development Laboratory		
EDP 350G	Adolescent Development		

## For those seeking certification for music studies, all-level:

Requirements		Hours	
EDC 331S	School Organization and Classroom Management in Secondary Schools		3
EDC 332S	Designs for Instruction		3
EDC 370S	Secondary School Subjects		3
EDC 951W	All Level Teaching Practicum (Topic 4)		9
PSY 301	Introduction to Psychology		3
MUS 354C	Children's Music Literature and Performance I		3
Three credit hours in human development chosen from the following:			3
PSY 304	Introduction to Child Psychology		
PSY 309	Personality		
HDF 313 & HDF 113L	Child Development and Child Development Laboratory		
EDP 350G	Adolescent Development		

## **Bachelor of Fine Arts**

## **Core Curriculum**

All students must complete the University's Core Curriculum (p. 23). In the process of fulfilling the core curriculum and other degree requirements, all students are expected to complete the Skills and Experience flags:

- 1. Writing: two flagged courses beyond Rhetoric and Writing 306 or its equivalent
- 2. Quantitative Reasoning: one flagged course
- 3. Global Cultures: one flagged course
- 4. Cultural Diversity in the United States: one flagged course
- 5. Ethics: one flagged course
- 6. Independent Inquiry: one flagged course

Courses that may be used to fulfill core curriculum and flag requirements are identified in the *Course Schedule* (https://registrar.utexas.edu/ schedules). They may be used simultaneously to fulfill other

requirements, unless otherwise specified. *Please note, students may not earn the cultural diversity and global cultures flags from the same course.* Students are encouraged to discuss options with a departmental academic adviser.

## Studio Art Major

## **Major Requirements**

- 1. Studio art: 57 semester hours, consisting of a. Studio Art 301C, 302C, and 303C
  - b. 39 semester hours in one of five options:
    - i. Option I: Photography, Printmaking, Painting/Drawing 1. Studio Art 317K, 310P, 311K, and 315K or 316K
      - 24 semester hours chosen from: Studio Art 320F, 340F, 335K, 372K, 325G, 325J, 325K, 325M, 330P, 321K, 341K, 361K, 315K, 316K, 322K, 346K, 366K, 376K, 368N, 350, and 350P
      - 3. Three semester hours chosen from: Studio Art 313K, 316V, 317C, and 318C
    - ii. Option II: Sculpture, Transmedia, Painting/Drawing
      - 1. Studio Art 313K, 311K, 315K or 316K, and three semester hours chosen from: 316V, 317C, and 318C
      - 24 semester hours chosen from: Studio Art 323K, 323S, 363K, 316V, 317C, 318C, 336V, 337C, 338C, 356V, 357C, 358C, 321K, 341K, 361K, 315K, 316K, 322K, 346K, 366K, 368N, 320F, 340F, 350, and 350P
      - 3. Three semester hours chosen from: Studio Art 310P and 317K  $\,$
    - iii. Option III: Transmedia, Sculpture, Photography
      - 1. Studio Art 313K, 317K, and six semester hours chosen from: 316V, 317C, and 318C
      - 24 semester hours chosen from: Studio Art 316V, 317C, 318C, 336V, 337C, 338C, 356V, 357C, 358C, 323K, 323S, 363K, 335K, 320F, 340F, 372K, 376K, 350, and 350P
      - 3. Three semester hours chosen from: Studio Art 310P, 311K, 315K, and 316K
    - iv. Option IV: Photography, Printmaking, Sculpture
      - 1. Studio Art 317K, 310P, and 313K
      - 27 semester hours chosen from: Studio Art 335K, 372K, 325G, 325J, 325K, 325M, 330P, 323K, 323S, 320F, 340F, 363K, 376K, 350, and 350P
      - 3. Three semester hours chosen from: Studio Art 311K, 315K, 316K, 316V, 317C, and 318C
    - v. Option V: Transmedia, Painting/Drawing, Printmaking
      - 1. Studio Art 311K, 310P, 315K or 316K, and three semester hours chosen from: 316V, 317C, and 318C
      - 24 semester hours chosen from: Studio Art 316V, 317C, 318C, 336V, 337C, 338C, 356V, 357C, 358C, 321K, 341K, 361K, 315K, 316K, 322K, 346K, 366K, 368N, 325G, 325J, 325K, 325M, 320F, 340F, 330P, 350, and 350P
      - 3. Three semester hours chosen from: Studio Art 313K or 317K
  - c. Nine additional semester hours, consisting of Studio Art 350S and six hours of Studio Art 350T
- 2. Art history: 15 semester hours, consisting of
  - a. Art History 302, 303, and 304
  - b. Six semester hours of upper-division coursework in art history, three semester hours of which may also be counted toward the visual and performing arts requirement of the core curriculum

## Electives

Six semester hours chosen from courses either within or outside the Department of Art and Art History. Additional elective coursework may be needed to provide the total number of semester hours required for the degree.

## **Total Minimum Requirements**

For the BFA with a major in studio art: 120 semester hours as outlined above.

## Design Major

## **Major Requirements**

- 1. Design courses: 30 semester hours, consisting of
  - a. Design 309 with a grade of at least *C*
  - b. Design 360 with a grade of at least C
  - c. Design 375 with a grade of at least C
  - d. 21 additional semester hours of upper-division courses in design
- 2. Supportive courses in design, related technologies, and the visual arts: 24 semester hours, consisting of
  - a. Studio Art 301C, 302C, and 303C
  - b. Fifteen additional semester hours of approved supportive courses in Design (DES) or related fields. The School of Design and Creative Technologies' advising office maintains a list of preapproved supportive courses
- 3. Art/design history/theory/criticism courses: 12 semester hours consisting of
  - a. Art History 303
  - b. Art History 304 or Design 308
  - c. Design 336
  - d. Three additional semester hours of courses in Art History or approved art/design history/theory/criticism courses in related fields. The School of Design and Creative Technologies' advising office maintains a list of pre-approved supportive courses

In order to enroll in courses numbered Design 340 or higher, a design major must first pass a performance review conducted by the design faculty.

Several of the courses which may be used to complete requirement 3 are also approved to fulfill the visual and performing arts requirement of the core curriculum and may be used to fulfill both.

## Electives

12 semester hours chosen from courses either within or outside the School of Design and Creative Technologies. Additional elective coursework may be needed to provide the total number of semester hours required for the degree.

## **Total Minimum Requirements**

For the BFA with a major in design: 120 semester hours as outlined above.

## Visual Art Studies Major

The major in visual art studies is a preprofessional academic program recommended for students seeking all-level (early childhood through grade 12) teacher certification in art or planning to pursue undergraduate or graduate training for visual art careers in community art programs. Students seeking teacher certification must adhere to current state requirements in addition to the degree requirements described in this catalog. Students should contact the College of Education for current state certification requirements. See Preparation for Teacher Certification (p. 16) for additional information.

State of Texas teacher certification requirements are governed by the Texas Education Agency and are subject to change. Students must adhere to current teacher certification requirements, even if they differ from those listed in the University catalogs.

## **Major Requirements**

- 1. Studio art: 30 semester hours, consisting of
  - a. Studio Art 301C, 302C, and 303C
  - b. Nine semester hours, consisting of three hours from each of the following three areas:
    - i. Area A: Drawing, life drawing, painting
    - ii. Area B: Printmaking and photography
    - iii. Area C: Transmedia and sculpture
  - c. 12 additional semester hours of coursework in studio art, all of which must be upper-division
- 2. Art history: 12 semester hours, consisting of
  - a. Art History 302 and 303
  - b. Six semester hours of upper-division coursework in art history, three semester hours of which may also be counted toward the visual and performing arts requirement of the core curriculum.
- 3. Visual art studies: 12 semester hours of coursework in visual art studies
- 4. 12 semester hours approved by the visual art studies adviser.

## **Professional Development in Education**

Please see the UTeach-Fine Arts (p. 277) section of this catalog for more information.

## **Approved Electives**

Twelve semester hours of coursework approved by the visual art studies adviser. Additional elective coursework may be needed to provide the total number of semester hours required for the degree.

## **Total Minimum Requirements**

For the BFA with a major in visual art studies: 120 semester hours as outlined above.

## **Theatre Studies Major**

The major in theatre studies is a preprofessional academic program recommended for students seeking all-level teacher certification in theatre arts. Students seeking teacher certification must adhere to current state requirements in addition to the degree requirements described in this catalog. Students should contact the College of Education for current state certification requirements. See Preparation for Teacher Certification (p. 16) for additional information.

State of Texas teacher certification requirements are governed by the Texas Education Agency and are subject to change. Students must adhere to current teacher certification requirements, even if they differ from those listed in the University catalogs.

## **Major Requirements**

- 1. Theatre and dance core: 18 semester hours, consisting of Theatre and Dance 311C, 313C, 314M, 314Q, 317C, and 317D
- 2. Theatre studies emphasis: At least 33 semester hours, consisting of a. Acting and directing: Theatre and Dance 313D, 316D, and 323D
  - b. Design and technical production: six semester hours chosen from topics of Theatre and Dance 324 or 354T, including one

course in two of the following three areas: costume, lighting, and scenery

- c. Theatre studies: Theatre and Dance 326C, 326D, 326Q, and 626E
- d. Theatre and Dance 351T (Topic: Creative Drama II)
- 3. Six additional upper-division semester hours of coursework in theatre and dance, excluding production courses

Several of the courses which may be used to complete requirement 1 are also approved to fulfill the visual and performing arts requirement of the core curriculum and may be used to fulfill both.

## **Professional Development in Education**

Please see the UTeach-Fine Arts (p. 277) section of this catalog for more information.

## **Approved Electives**

24 semester hours of coursework approved by the theatre studies adviser. Additional elective coursework may be needed to provide the total number of semester hours required for the degree.

## **Total Minimum Requirements**

For the BFA with a major in theatre studies: 120 semester hours as outlined above.

## **Dance Major**

The option in Dance Studies is a preprofessional academic program recommended for students seeking all-level teacher certification in dance. Students seeking teacher certification must adhere to current state requirements in addition to the degree requirements described in this catalog. Students should contact the College of Education for current state certification requirements. See Preparation for Teacher Certification (p. 16) for additional information.

State of Texas teacher certification requirements are governed by the Texas Education Agency and are subject to change. Students must adhere to current teacher certification requirements, even if they differ from those listed in the University catalogs.

## **Major Requirements**

- 1. Theatre and dance core: 15 semester hours, consisting of Theatre and Dance 311C, 312M, 314P, 317M, and 317N
- 2. Physical Practice:
  - Contemporary dance technique: Nine semester hours, consisting of two semesters of Theatre and Dance 312C and one semester of either 312D or 352T
  - Ballet technique: Nine semester hours, consisting of two semesters of Theatre and Dance 312F and one semester of either 312G or 352T
- 3. Creative Practice: Six semester hours, consisting of Theatre and Dance 312N and 332M
- 4. Somatic Practice: Five semester hours, consisting of Theatre and Dance 212 and 352
- 5. Pedagogical Practice: Theatre and Dance 332R
- 6. Performance Practice: Four semester hours, consisting of Theatre and Dance 212P and 222P
- 7. Option in either Dance or Dance Studies:
  - a. For Option in Dance: 27 semester hours, consisting of
    - i. Physical Practice: Theatre and Dance 312D and 312G
    - ii. Creative Practice: Theatre and Dance 332N
    - iii. Somatic Practice: Theatre and Dance 352T

- iv. Performance Practice: Theatre and Dance 212P, 222P, and 232P
- v. Electives: Three hours chosen from an approved list of topics in history, theory, criticism, or cultural diversity, and six hours chosen from Theatre and Dance 322E, 322J, 352P, or 352T
- b. For Option in Dance Studies: 27 or 28 semester hours, consisting of
  - i. Performance Practice: Theatre and Dance 222P or 232P
  - ii. Academic Studies: Theatre and Dance 152P
  - iii. Professional Development: Applied Learning and Development 322, Curriculum and Instruction (EDC) 332S, 331S, 370S, 951W, and one of the following:
    - 1. Human Development and Family Sciences 313 and 113L
    - 2. EDP 350G
    - 3. Psychology 304

To fulfill the degree requirements in dance technique, the student must achieve a suitable level of proficiency and obtain the approval of the dance faculty. At the discretion of the dance faculty, a student may be required to repeat specific dance technique courses in addition to those required for the degree. Students choosing the Option in Dance must be registered for dance technique each long-session semester in residence. To continue in this degree program, the student must pass an annual evaluation by the dance faculty. Students whose progress in dance technique is judged unsatisfactory by the faculty will be dismissed from the program.

## Professional Development in Education (Dance Studies option)

Please see the UTeach-Fine Arts (p. 277) section of this catalog for more information.

## Electives

Elective coursework may be needed to provide the total number of semester hours required for the degree.

## **Total Requirements**

For the BFA with a major in dance: at least 120 or 121 semester hours as outlined above.

## Acting Major

## **Major Requirements**

- 1. Theatre and dance core: 18 semester hours, consisting of Theatre and Dance 311C, 314M, 314P, 317C, 317D, and 324P
- Acting Emphasis: At least 48 semester hours, consisting of

   Lower-division acting emphasis: Theatre and Dance 313C, 313D, 313E, 313F, 313G, 313K, 313L, 313M, and 313N
  - b. Upper-division acting emphasis: Theatre and Dance 323F, 320J, 321P or 323P, 353C, 353D, 353Q, and 353K or 353T

## **Approved Electives**

12 semester hours of approved electives within the Department of Theatre and Dance chosen from the following:

- 1. Industry Internship: Theatre and Dance 372, 672, or 972
- 2. Theatre and Dance 353E, 353R, 353T, or additional upper-division semester hours in the Department of Theatre and Dance approved by the acting adviser

## **Total Minimum Requirements**

For the BFA with a major in acting: at least 120 semester hours as outlined above.

## **Bachelor of Music**

## Core Curriculum

All students must complete the University's Core Curriculum (p. 23). In the process of fulfilling the core curriculum and other degree requirements, all students are expected to complete the Skills and Experience flags:

- 1. Writing: two flagged courses beyond Rhetoric and Writing 306 or its equivalent
- 2. Quantitative Reasoning: one flagged course
- 3. Global Cultures: one flagged course
- 4. Cultural Diversity in the United States: one flagged course
- 5. Ethics: one flagged course
- 6. Independent Inquiry: one flagged course

Courses that may be used to fulfill core curriculum and flag requirements are identified in the *Course Schedule* (https://registrar.utexas.edu/ schedules). They may be used simultaneously to fulfill other requirements, unless otherwise specified. *Please note, students may not earn the cultural diversity and global cultures flags from the same course.* Students are encouraged to discuss options with a departmental academic adviser.

## Voice Performance Major

## **Major Requirements**

- 1. Performance: 26 semester hours, consisting of four semesters of Voice 210, two semesters of Voice 362, Music 420R, Music 460R, Music 210K and approval of the faculty, and Music 223J
- Music literature and music theory: Music 605, 411, 612, 312C, 213M, 213N, 321J, 230L, and three hours chosen from Music 325L, 325M, 331J, 334, 337, 342, 343J, and 379K
- 3. Diction: Music 111E, 311F, 311G, and 311J
- 4. Music pedagogy: Music 271P (Topic 3: Pedagogy: Voice 1)
- 5. Music ensemble: At least eight semester hours of music ensemble courses as explained in Butler School of Music Special Requirements (p. 276)

When taken in residence, Music 312C may also be counted toward the three-semester-hour writing flag portion of the core curriculum English composition requirement Music 334 which may be used to complete requirement 2 is also approved to fulfill the visual and performing arts requirement of the core curriculum and may be used to fulfill both.

## **Electives**

Four semester hours chosen from courses either within or outside the Butler School of Music. Additional elective coursework may be needed to provide the total number of semester hours required for the degree.

## **Total Minimum Requirements**

For the BMusic with a major in voice performance: 120 semester hours as outlined above.

## **Piano Performance Major**

## **Major Requirements**

- 1. Performance: With the recommendation of the faculty, given in advance, students may choose either of the following two options.
  - a. Normally suggested for students who wish to emphasize performance: 32 semester hours, consisting of four semesters of Piano 312, two semesters of Piano 362, Music 420R, Music 271P (Topic 1: *Pedagogy: Piano 1*), 460R, and 222J or 223J
  - b. Normally suggested for students who wish to emphasize pedagogy: 32 semester hours, consisting of four semesters of Piano 312, two semesters of Piano 260, 362, Music 271P (Topic 2: *Pedagogy: Piano 2*), 460R, 366P, and 222J or 223J
- Music literature and music theory: Music 605, 411, 612, 312C, 213M, 213N, 321J, 325M, 230L; two semesters of Music 259N; and three hours chosen from Music 325L, 331J, 334, 337, 342, 343J, and 379K
- 3. Music ensemble: Eight semester hours of music ensemble courses as explained in Butler School of Music Special Requirements (p. 276)

When taken in residence, Music 312C may also be counted toward the three-semester-hour writing flag portion of the core curriculum English composition requirement. Music 334 which may be used to complete requirement 2 is also approved to fulfill the visual and performing arts requirement of the core curriculum and may be used to fulfill both.

## Electives

Three semester hours to be chosen from courses either within or outside the Butler School of Music. Additional elective coursework may be needed to provide the total number of semester hours required for the degree.

## **Total Minimum Requirements**

For the BMusic with a major in piano performance: 120 semester hours as outlined above.

## Organ or Harpsichord Performance Major

## **Major Requirements**

- Performance and pedagogy: 30 semester hours, consisting of four semesters of major instrument course 312, two semesters of major instrument course 362, Music 420R, 460R, 275T, and 222J or 223J
- Music literature and music theory: Music 605, 411, 612, 312C, 213M, 213N, 321J, 325L, 325M, 230L, and three semester hours chosen from Music 331J, 334, 337, 342, 343J, and 379K
- 3. Music ensemble: Two semesters of Music 259N and eight semester hours of music ensemble courses as explained in Butler School of Music Special Requirements (p. 276)

When taken in residence, Music 312C may also be counted toward the three-semester-hour writing flag portion of the core curriculum English composition requirement. Music 334 which may be used to complete requirement 2 is also approved to fulfill the visual and performing arts requirement of the core curriculum and may be used to fulfill both.

## Electives

Two semester hours chosen from courses either within or outside the Butler School of Music. Additional elective coursework may be needed to provide the total number of semester hours required for the degree.

## **Total Minimum Requirements**

For the BMusic with a major in organ or harpsichord performance: 120 semester hours as outlined above.

## Harp Performance Major

## **Major Requirements**

- Performance and pedagogy: 30 semester hours, consisting of four semesters of Harp 312, two semesters of Harp 362, Music 420R, 460R, 275T, and 222J
- Music literature and music theory: Music 605, 411, 612, 312C, 213M, 213N, 321J, 230L; three semester hours chosen from Music 331J, 334, 337, 342, 343J, and 379K; and two courses chosen from the following: Music 214C, 325L, 325M, 226J, and 226K
- 3. Music ensemble: Two semesters of Music 259N and eight semester hours of music ensemble courses as explained in Butler School of Music Special Requirements (p. 276)

When taken in residence, Music 312C may also be counted toward the three-semester-hour writing flag portion of the core curriculum English composition requirement. Music 334 which may be used to complete requirement 2 is also approved to fulfill the visual and performing arts requirement of the core curriculum and may be used to fulfill both.

### **Electives**

Two to four semester hours to be chosen from courses either within or outside the Butler School of Music. Additional elective coursework may be needed to provide the total number of semester hours required for the degree.

## **Total Minimum Requirements**

For the BMusic with a major in harp performance: 120 semester hours as outlined above.

## **Orchestral Instrument Performance Major**

This program is offered in the following instruments: violin, viola, violoncello, double bass, flute, oboe, clarinet, bassoon, saxophone, trumpet, French horn, euphonium, trombone, tuba, percussion, and guitar.

## **Major Requirements**

- 1. Performance and pedagogy:
  - a. Thirty-two semester hours, consisting of four semesters of major instrument course 312, two semesters of major instrument course 362, Music 420R, 460R, 222J, 275T, and 210K and approval of the faculty
  - b. For violin majors, proficiency in viola equivalent to Viola 201 and approval of the faculty
  - c. For euphonium majors, proficiency in trombone equivalent to Trombone 201 and approval of the faculty
- 2. Music literature and music theory:
  - a. Music 605, 411, 612, 312C, 213M, 213N, 321J, 226J, and 230L
  - b. Two semesters of either Music 259N or 259W
  - c. One of the following options, chosen with the consent of the undergraduate adviser.
    - i. Two additional semesters of Music 259N or 259W
    - ii. One semester of Music 325L, 325M, 331J, 334, 337, 342, 343J, or 379K
  - d. Three hours chosen from Music 325L, 325M, 331J, 334, 337, 342, 343J, or 379K

3. Music ensemble: Eight semester hours of music ensemble courses as explained in Butler School of Music Special Requirements (p. 276)

When taken in residence, Music 312C may also be counted toward the three-semester-hour writing flag portion of the core curriculum English composition requirement. Music 334 which may be used to complete requirement 2 is also approved to fulfill the visual and performing arts requirement of the core curriculum and may be used to fulfill both.

## Electives

One or more hours of additional elective coursework may be needed to provide the total number of semester hours required for the degree.

## **Total Minimum Requirements**

For the BMusic with a major in orchestral instrument performance: 120 semester hours as outlined above.

## Jazz Major

This program is offered in the following instruments: double bass, drum set, guitar, piano, saxophone, trombone, and trumpet.

## **Major Requirements**

- Music literature and music theory: Music 605, 411, 612, 312C, 213M, 213N, 321J, 226J, 228G, 228J, 228L, 328M, 230L, 343J, and 319D; majors and principals in instruments other than piano must also complete Music 228K.
- 2. Music ensemble: Eight semester hours of music ensemble courses as explained in Butler School of Music Special (p. 276) Requirements (p. 276)
- 3. For concentration in Performance:
  - a. Piano: 22 semester hours, consisting of:
    - i. Two semesters of Piano 212 and two semesters of Piano 212J with faculty approval; or four semesters of Piano 212J with faculty approval
    - ii. Two semesters of Piano 362J
    - iii. Music 420J
    - iv. Music 460J
  - b. Drum set: 24 semester hours, consisting of:
    - i. Two semesters of Percussion 212 and two semesters of Drum Set 212J with faculty approval; or four semesters of Drum Set 212J with faculty approval
    - ii. Two semesters of Drum Set 362J
    - iii. Music 210J with faculty approval
    - iv. Music 420J
    - v. Music 460J
  - c. Other instruments: 24 semester hours, consisting of:
    - i. Two semesters of principal instrument course 212 and two semesters of principal instrument course 212J with faculty approval; or four semesters of principal instrument course 212J with faculty approval
    - ii. Two semesters principal instrument course 362J
    - iii. Music 210J with faculty approval
    - iv. Music 420J
    - v. Music 460J
- 4. For concentration in Composition:
  - a. Piano: 23 semester hours, consisting of:
    - i. Music 214C
    - ii. Three semesters of Music 228P

- iii. Two semesters of Piano 212 and two semesters of Piano 212J with faculty approval; or four semesters of Piano 212J with faculty approval
- iv. Piano 362J
- v. Music 420J
- b. Other instruments: 25 semester hours, consisting of:
  - i. Music 214C
  - ii. Three semesters of Music 228P
  - iii. Two semesters of principal instrument course 212 and two semesters of principal instrument course 212J with faculty approval; or four semesters of principal instrument course 212J with faculty approval
  - iv. Principal instrument course 362J
  - v. Music 210J with faculty approval
  - vi. Music 420J

Each student must also complete a recital of compositions and/or arrangements. This recital is given in the senior year and must be approved by the jazz faculty.

When taken in residence, Music 312C may also be counted toward the three-semester-hour writing flag portion of the core curriculum English composition requirement.

## Electives

For emphasis in performance: two to four semester hours chosen from courses either within or outside the Butler School of Music. Additional elective coursework may be needed to provide the total number of semester hours required for the degree.

For emphasis in composition: one to three semester hours chosen from courses either within or outside the Butler School of Music. Additional elective coursework may be needed to provide the total number of semester hours required for the degree.

## **Total Minimum Requirements**

For the BMusic with a major in jazz: 120 semester hours as outlined above.

## **Composition Major**

## **Major Requirements**

- 1. Performance: At least six semester hours, consisting of two semesters of Piano 201 or Piano 210 and approval of the faculty, and Music 222J or 223J.
- Music literature and music theory: Music 605, 411, 612, 312C, 213M, 213N, 321J, 325L, 325M, 226J, 226K, 230L, 364L, and three semester hours chosen from Music 331J, 334, 337, 342, 343J, and 379K.
- 3. Composition: Three semesters of Music 224G, at least three semesters of 224J and approval of the music theory and composition faculty, 319D, and three semester hours chosen from Music 350S, 329E, 329F, 329G, 329J, and 329M. Fulfillment of this requirement signifies the completion of original compositions of a quality and a quantity sufficient to present the composition recital described below. At the discretion of the music theory and composition faculty, a student may be required to complete more than three semesters of Music 224J.
- 4. Recital: Music 160C. Upon approval of the music theory and composition faculty, a composition major must present a recital of his or her works. The recital must be approximately thirty minutes in length and must consist of works approved by the student's composition instructor. It is normally given during the student's last semester of Music 224J. It is graded by a jury of designated music

theory and composition faculty members. The student must receive from the jury an average grade of at least *B*- for the recital; if the average grade is less than *B*-, the student, upon approval of the music theory and composition faculty, must present another composition recital.

5. Music ensemble: Eight semester hours of music ensemble courses as explained in Butler School of Music Special Requirements (p. 276).

When taken in residence, Music 312C may also be counted toward the three-semester-hour writing flag portion of the core curriculum English composition requirement. Music 334 which may be used to complete requirement 2 is also approved to fulfill the visual and performing arts requirement of the core curriculum and may be used to fulfill both.

## Electives

One to four semester hours to be chosen from courses either within or outside the Butler School of Music. Additional elective coursework may be needed to provide the total number of semester hours required for the degree.

## **Total Minimum Requirements**

For the BMusic with a major in composition: 120 semester hours as outlined above.

## **Music Studies Major**

The major in music studies is a preprofessional academic program recommended for students seeking all-level teacher certification in music or intending to pursue graduate preparation for careers in areas such as music and human learning, music therapy, music management, music merchandising, music publishing, and community music development. Students seeking teacher certification must adhere to current state requirements in addition to the degree requirements described in this catalog. Students should contact the College of Education for current state certification requirements. See Preparation for Teacher Certification (p. 16) for additional information.

State of Texas teacher certification requirements are governed by the Texas Education Agency and are subject to change. Students must adhere to current teacher certification requirements, even if they differ from those listed in the University catalogs.

## **Major Requirements**

- 1. Performance: 12 to 16 semester hours, consisting of four semesters of principal instrument course 210; two semesters of principal instrument course 260 and approval of the faculty; and Music 201M and Music 201F or equivalent proficiency, and approval of the faculty. Music 201F or equivalent proficiency is required of all music studies majors, regardless of principal instrument. In addition to these requirements, the student must make a recital appearance as described in Butler School of Music Special Requirements (p. 276).
- 2. Music theory and literature: Music 605, 411, 612, 312C, 213M, 213N, 230L.
- 3. Conducting: Four semester hours, consisting of either Music 222J and 222K, or 223J and 223K.
- 4. Choral or instrumental music techniques, literature, and performance practices: 15 to 17 semester hours in one of the following areas of emphasis.
  - a. Choral music emphasis:
    - i. Music 354C, 255V, and 456G.
    - ii. Music 354D or three semester hours approved by the music studies adviser.

- iii. Two semester hours chosen from Music 255D (strings), 255E (brasses), and 255F (woodwinds).
- iv. One semester hour chosen from Music 115D (violin), 115E (trumpet), 115F (clarinet), 115G, and 155C. The course used to fulfill this requirement must involve the study of a family of instruments different from that used to fulfill the preceding requirement.
- b. Instrumental music emphasis: Music 354C, 155C, 255D, 255E, 255F, and 356J; and, with the approval of the music studies adviser, four semester hours chosen from 115D, 115E, 115F, and 255M.
- 5. Music ensemble: Six semester hours of music ensemble courses as explained in Butler School of Music Special Requirements. (p. 276)

When taken in residence, Music 312C may also be counted toward the three-semester-hour writing flag portion of the core curriculum English composition requirement. In addition, MUS 312C is also approved to fulfill the visual and performing arts requirement of the core curriculum.

## **Professional Development in Education**

Twenty-one semester hours of coursework as currently required by the State of Texas for teacher certification. Should a student decide, in the course of their studies, to pursue this degree without seeking teacher certification, additional elective coursework may be selected up to 120 hours.

Please see the UTeach-Fine Arts (p. 277) section of this catalog for more information.

## **Total Minimum Requirements**

For the BMusic with a major in music studies: 120-125 semester hours as outlined above.

## **Bachelor of Arts**

## **Core Curriculum**

All students must complete the University's Core Curriculum (p. 23). In the process of fulfilling the core curriculum and other degree requirements, all students are expected to complete the Skills and Experience flags:

- 1. Writing: two flagged courses beyond Rhetoric and Writing 306 or its equivalent
- 2. Quantitative Reasoning: one flagged course
- 3. Global Cultures: one flagged course
- 4. Cultural Diversity in the United States: one flagged course
- 5. Ethics: one flagged course
- 6. Independent Inquiry: one flagged course

Courses that may be used to fulfill core curriculum and flag requirements are identified in the *Course Schedule* (http://registrar.utexas.edu/ schedules). They may be used simultaneously to fulfill other requirements, unless otherwise specified. *Please note, students may not earn the cultural diversity and global cultures flags from the same course*. Students are encouraged to discuss options with a departmental academic adviser.

## Studio Art Major

## **Prescribed Work**

- 1. Foreign language: Beginning level proficiency in a foreign language.
- Social and behavioral sciences: Six semester hours chosen from the following areas: anthropology, economics, geography, government,

history, linguistics, psychology, and sociology. A course counted toward this requirement may not also be counted toward any core curriculum requirement.

- 3. General culture: Three semester hours chosen from the following areas: architecture, classics (including classical civilization, Greek, Latin), comparative literature, humanities, philosophy, and interdisciplinary fields outside the Department of Art and Art History such as American studies, African and African diaspora studies, Asian studies, Latin American studies, Mexican American studies, and women's and gender studies. The student is encouraged to choose coursework of a multicultural nature. Courses outside the Department of Art and Art History that are cross-listed with courses in the department may not be used to fulfill this requirement. A course used to fulfill this requirement may not also be counted toward any core curriculum requirement.
- 4. Science, technology, and mathematics: Six semester hours of coursework. Courses must be chosen from computer science, mathematics, and the fields of study included in the science and technology, part I, requirement of the core curriculum. A course counted toward this requirement may not also be counted toward any core curriculum requirement.

## **Major Requirements**

- 1. Studio art: 27 semester hours, consisting of Studio Art 301C, 302C, and 303C, and 18 additional semester hours of studio art, of which at least 12 hours must be upper-division.
- 2. Art history: 15 semester hours, consisting of Art History 302, 303, 304, and six hours of upper-division coursework in art history. Several of the courses which may be used to complete this requirement are also approved to fulfill the visual and performing arts requirement of the core curriculum and may be used to fulfill both.

## Electives

Nine to 15 semester hours chosen from courses either within or outside the Department of Art and Art History. Additional elective coursework may be needed to provide the total number of semester hours required for the degree.

## **Total Minimum Requirements**

For the BA with a major in studio art: 120 semester hours as outlined above.

## Art History Major

## **Prescribed Work**

- 1. Foreign language: Intermediate level proficiency in a foreign language.
- 2. Social and behavioral sciences: Six semester hours chosen from the following areas: anthropology, economics, geography, government, history, linguistics, psychology, and sociology. A course counted toward this requirement may not also be counted toward any core curriculum requirement.
- 3. General culture: Three semester hours in one of the following areas:
  - a. Architecture
  - b. Classics, including classical civilization, Greek, Latin (but excluding any courses in Greek or Latin that are used to fulfill the language requirement)
  - c. Music
  - d. Philosophy
  - e. Radio-television-film
  - f. Theatre and dance

g. Programs of special concentration, such as women's and gender studies and Latin American studies

A course used to fulfill requirement 3 may not also be counted toward any core curriculum requirement.

## **Major Requirements**

- 1. Studio Art 301C or 302C
- 2. Art history: 36 semester hours, consisting of a. Art History 302, 303, 304, 321, and 375
  - b. Twelve semester hours of upper division art history courses chosen to meet:
    - i. Three of the following geographical areas:
      - 1. Europe & the Mediterranean
      - 2. Asia & Pacific
      - 3. Middle East & Africa
      - 4. The Americas
      - 5. Diaspora & Transcultural
    - ii. And one in each of the following three periods:
      - 1. Prehistoric 400
      - 2. 400 1500
      - 3. 1500 present
    - iii. Coursework chosen to fulfill requirement ii may simultaneously satisfy requirement i.
  - c. Nine additional semester hours of art history, of which six must be upper division

Several of the courses which may be used to complete requirement 2 are also approved to fulfill the visual and performing arts requirement of the core curriculum and may be used to fulfill both.

## Electives

Twelve to 18 semester hours chosen from courses either within or outside the Department of Art and Art History. Additional elective coursework may be needed to provide the total number of semester hours required for the degree.

## **Total Minimum Requirements**

For the BA with a major in art history: 120 semester hours as outlined above.

## **Design Major**

## **Prescribed Work**

Foreign language: Intermediate level proficiency in a foreign language.

## **Major Requirements**

- 1. Design courses: 24 semester hours, consisting of:
  - a. Design 309 with a grade of at least C
  - b. Design 374 with a grade of at least C
  - c. Eighteen semester hours of design courses, of which at least nine hours must be upper division. Design 336 may not be counted. In order to enroll in courses numbered Design 340 or higher, a design major must first pass a performance review conducted by the design faculty.
- Supportive courses in studio art: Nine semester hours, consisting of a. Studio Art 301C, 302C, and 303C
- 3. Art/design history/theory/criticism courses: Nine semester hours chosen from

- a. Art History 303
- b. Art History 304 or Design 308
- c. Design 336

Several of the courses which may be used to complete requirement 3 are also approved to fulfill the visual and performing arts requirement of the core curriculum and may be used to fulfill both.

## Electives

Eighteen semester hours chosen from courses either within or outside the School of Design and Creative Technologies. Additional elective coursework may be needed to provide the total number of semester hours required for the degree.

## **Total Minimum Requirements**

For the BA with a major in design: 120 semester hours as outlined above.

## Bachelor of Arts in Theatre and Dance

## **Core Curriculum**

All students must complete the University's Core Curriculum (p. 23). In the process of fulfilling the core curriculum and other degree requirements, all students are expected to complete the Skills and Experience flags:

- 1. Writing: two flagged courses beyond Rhetoric and Writing 306 or its equivalent
- 2. Quantitative Reasoning: one flagged course
- 3. Global Cultures: one flagged course
- 4. Cultural Diversity in the United States: one flagged course
- 5. Ethics: one flagged course
- 6. Independent Inquiry: one flagged course

Courses that may be used to fulfill core curriculum and flag requirements are identified in the *Course Schedule* (http://registrar.utexas.edu/ schedules). They may be used simultaneously to fulfill other requirements, unless otherwise specified. *Please note, students may not earn the cultural diversity and global cultures flags from the same course*. Students are encouraged to discuss options with a departmental academic adviser.

## **Prescribed Work**

- 1. Foreign language: Intermediate level proficiency in a foreign language.
- 2. General culture: Three semester hours chosen from the following areas: architecture, classics (including classical civilization, Greek, Latin), comparative literature, humanities, philosophy, and interdisciplinary fields outside the Department of Theatre and Dance such as American studies, African and African diaspora studies, Asian studies, Latin American studies, Mexican American studies, and women's and gender studies. The student is encouraged to choose coursework of a multicultural nature. Courses outside the Department of Theatre and Dance that are cross-listed with theatre and dance courses may not be used to fulfill this requirement. A course used to fulfill this requirement may not also be counted toward any core curriculum requirement.

## **Major Requirements**

1. Theatre and dance core: 21 semester hours, consisting of the following courses: Theatre and Dance 311C, 311D, 314M, and

314P; two semesters of Theatre and Dance 324P; and three semester hours chosen from Theatre and Dance 351S, 357T, and 375H.

#### 2. Choice of emphasis in:

- a. **Playwriting and directing**: Theatre and Dance 313C, 315, 316D, 317C, 317D, and 321P; six semester hours chosen from Theatre and Dance 325, 325P, 351T, or 355T; six semester hours chosen from Theatre and Dance 323D, 323P, 355T, or 626E; and six lower- or upper-division semester hours of additional theatre and dance courses.
- b. Performer's process: Theatre and Dance 306, 313C, 313D, 313E or 315, 316D, 321P, 323D, and 353T, either 317C and 317D, or 317M and 317N; and six upper-division semester hours of additional theatre and dance courses.
- c. **History, literature, and dramaturgy**: Theatre and Dance 313C, 316D, 317C, 317D, 317M, 317N, 321P, and 357D; and 12 semester hours of additional theatre and dance courses, of which at least nine must be upper-division.
- d. Theatre for youth and communities: Six semester hours chosen from Theatre and Dance 302T, 313C, 313D, 314C, or 316D; either 317C and 317D, or 317M and 317N; Theatre and Dance 321P, 326C, 326D, and 351F; and 12 semester hours of additional theatre and dance courses, of which at least three must be upper-division.
- e. **Design and technology**: Theatre and Dance 313C, 314C, and 321P; either 317C and 317D, or 317M and 317N; and 21 semester hours of additional theatre and dance courses, of which at least 12 must be upper-division.
- f. **Dance**: Theatre and Dance 112P, 212, 317M, 317N; either 322C and 322D or 322F and 322G; six hours chosen from Theatre and Dance 222P, 322C, 322D, 322E, 322F, 322G, 322J, or 352T; and 15 semester hours of additional theatre and dance courses, of which at least nine must be from the dance program and three must be upper-division.

### **Electives**

Zero to six semester hours chosen from courses either within or outside the Department of Theatre and Dance. Additional elective coursework may be needed to provide the total number of semester hours required for the degree.

Students considering graduate study should consult their advisers about the most appropriate choice of courses.

### **Total Minimum Requirements**

For the Bachelor of Arts in Theatre and Dance: 120 semester hours as outlined above.

# **Bachelor of Arts in Music**

### **Core Curriculum**

All students must complete the University's Core Curriculum (p. 23). In the process of fulfilling the core curriculum and other degree requirements, all students are expected to complete the Skills and Experience flags:

- 1. Writing: two flagged courses beyond Rhetoric and Writing 306 or its equivalent
- 2. Quantitative Reasoning: one flagged course
- 3. Global Cultures: one flagged course
- 4. Cultural Diversity in the United States: one flagged course

- 5. Ethics: one flagged course
- 6. Independent Inquiry: one flagged course

Courses that may be used to fulfill core curriculum and flag requirements are identified in the *Course Schedule* (https://registrar.utexas.edu/ schedules). They may be used simultaneously to fulfill other requirements, unless otherwise specified. *Please note, students may not earn the cultural diversity and global cultures flags from the same course*. Students are encouraged to discuss options with a departmental academic adviser.

### **Prescribed Work**

- 1. Foreign language: Intermediate level proficiency in a foreign language.
- 2. General culture: Three semester hours chosen from the following areas: architecture, classics (including classical civilization, Greek, Latin), comparative literature, humanities, philosophy, and interdisciplinary fields outside the Butler School of Music such as American studies, African and African diaspora studies, Asian studies, Latin American studies, Mexican American studies, and women's and gender studies. The student is encouraged to choose coursework of a multicultural nature. Courses outside the Butler School of Music that are cross-listed with music courses may not be used to fulfill this requirement. A course used to fulfill this requirement may not also be counted toward any core curriculum requirement.

### **Major Requirements**

- Performance: At least 12 semester hours, consisting of four semester hours of music ensemble courses as explained in Butler School of Music Special Requirements (p. 276); and Music 201N (completed to the satisfaction of faculty) for students whose principal instrument is not piano
  - a. Emphasis in Music: Four semesters of principal instrument course 210 and approval of the faculty
  - b. Emphasis in Composition: Two semesters of Music 224G, Intermediate Composition, two semesters of Music 224J, Advanced Composition, and approval of the music theory and composition faculty
- 2. Music: Music 605, 411, 612, 312C, 213M, 213N, and 230L
- 3. 15 semester hours in a concentration of music courses approved by the coordinator of the Bachelor of Arts in Music program, at least 11 hours of which must be upperdivision, and including at least three hours chosen from Music 321J, 325L, 325M, 331J, 334, 337, 342, 343J, or 379K

When taken in residence, Music 312C (in requirement 2) may also be counted toward the three-semester-hour writing flag portion of the core curriculum English composition requirement. Music 334 which may be used to complete requirement 3 is also approved to fulfill the visual and performing arts requirement of the core curriculum and may be used to fulfill both.

### Secondary Field of Study

The secondary field of study must be approved by the coordinator of the Bachelor of Arts in Music program, include twelve semester hours of coursework outside the Butler School of Music, and must include at least six hours of upper-division coursework.

### **Electives**

Two or more hours of additional elective coursework may be needed to provide the total number of semester hours required for the degree. Courses that are crosslisted with music courses may not be counted toward this requirement.

### **Total Minimum Requirements**

For the Bachelor of Arts in Music: 120 semester hours as outlined above.

## Advancement to Upper-Division Standing

To advance to upper-division standing in the program, the student must meet the following requirements:

- 1. Upper-division standing at the University
- 2. A grade point average of at least 2.50 for all coursework taken in residence at the University
- 3. Completion of the following courses or their equivalents with a grade point average of at least 2.50: Music 201N (required only for students whose principal instrument is not piano), 605A, 605B, 411A, 411B, 612A, 612B, 312C, 213M, and 213N
- 4. Approval of the coordinator of the Bachelor of Arts in Music program

When taken in residence, Music 312C (in requirement 3) may also be counted toward the three semester-hour-writing flag portion of the core curriculum English composition requirement.

# Bachelor of Science in Arts and Entertainment Technologies

### Core Curriculum

All students must complete the University's Core Curriculum (http:// catalog.utexas.edu/general-information/academic-policies-andprocedures/core-curriculum). In the process of fulfilling the core curriculum and other degree requirements, all students are expected to complete the Skills and Experience flags:

- 1. Writing: two flagged courses beyond Rhetoric and Writing 306 or its equivalent
- 2. Quantitative Reasoning: one flagged course
- 3. Global Cultures: one flagged course
- 4. Cultural Diversity in the United States: one flagged course
- 5. Ethics: one flagged course
- 6. Independent Inquiry: one flagged course

Courses that may be used to fulfill core curriculum and flag requirements are identified in the Course Schedule (http://registrar.utexas.edu/ schedules). They may be used simultaneously to fulfill other requirements, unless otherwise specified. *Please note, students may not earn the cultural diversity and global cultures flags from the same course.* Students are encouraged to discuss options with a departmental academic adviser.

### **Prescribed Work**

- 1. Foreign language: Beginning level proficiency in a foreign language.
- 2. Social Science and Humanities: Six semester hours chosen from the following areas: anthropology, architecture, art, classics (classical civilization, Greek, or Latin), economics, geography, government, history, linguistics, music, philosophy, psychology, radiotelevision-film, sociology, theatre and dance, or programs of special concentration outside any specific department (such as women's studies and Latin American studies). A course used to fulfill this requirement may not also be counted toward any core curriculum requirement.

### **Major Requirements**

- 1. Foundations: 15 semester hours, consisting of the following courses: Arts and Entertainment Technologies 304 and 310; and nine semester hours of lower-division coursework in Arts and Entertainment Technologies.
- 2. Colloquium: Arts and Entertainment Technologies 101, 102, and 103
- 3. Advanced coursework: 24 upper-division semester hours chosen from Arts and Entertainment Technologies with approval of adviser.
- 4. Capstone, Senior Thesis, chosen from one of the following options:a. Option 1: Arts and Entertainment Technologies 376 and 377
  - b. Option 2: Arts and Entertainment Technologies 378 and 379

Arts and Entertainment Technologies 304, which may be used to complete requirement 1, is also approved to fulfill the visual and performing arts requirement of the core curriculum and may be used to fulfill both.

### Secondary Field of Study

The secondary field of study must be 15 semester hours, approved by the coordinator of the Arts and Entertainment Technologies program, and include at least nine hours of upper division coursework.

### Electives

Zero to six semester hours. Additional elective coursework may be needed to provide the total number of semester hours required for the degree.

### **Total Minimum Requirements**

For the Bachelor of Science in Arts and Entertainment Technologies: 120 semester hours as outlined above.

# **Minor and Certificate Programs**

### Minor

The transcript-recognized undergraduate academic minor must be completed in conjunction with an undergraduate degree at The University of Texas at Austin. For more information regarding the requirements for achieving a minor, including a comprehensive list of minors, please visit the Minors and Certificate Programs (p. 13) section of the Undergraduate Catalog.

### **Art History Minor**

The Art History Minor requirements are:

Requirements	Hours	
Fifteen semester hours of coursework in art history, including at least 12 hours of upper-division coursework.		15
Please Note:		
All classes must be taken on the letter-grade basis. The student must earn a combined grade point average of at least 2.50 in minor coursework.	t	

### Arts Management and Administration Minor

The Arts Management and Administration Minor requirements are:

Requirements	Hours	
F A 362	Foundations of Arts Management	3
ACC 310F	Foundations of Accounting	3
or ACC 312	Fundamentals of Managerial Accounting	

F A 340	Fine Arts Internship	3
One of the following cou	rses:	3
F A 363	Arts Entrepreneurship and New Venture Creation	
F A 364	Developing and Reaching Audiences	
F A 365	Fundraising in the Arts	
F A 366	Managing Arts Organizations	
F A 367	Philanthropy and Arts Organizations	
F A 368	Cultural Policy and Participation	
F A 369	The Entrepreneurial Artist	
F A 370	Longhorn Startup Seminar	
F A 371	Special Topics in Arts Management and Administration (Any topic)	
One of the following cou	rses:	3
MAN 320F	Foundations of Management and Organizational Behavior	
or MAN 336	Organizational Behavior	
MKT 320F	Foundations of Marketing	
or MKT 337	Principles of Marketing	
FIN 320F	Foundations of Finance	
or FIN 357	Business Finance	
LEB 320F	Foundations of Business Law and Ethics	
or LEB 323	Business Law and Ethics	
I B 320F	Foundations of International Business	
or I B 350	International Trade	
Please Note:		

Please Note:

A 2.50 overall grade point average in minor coursework is required. All courses must be taken on the letter-grade basis.

### **Minor in Studio Art**

The Minor in Studio Art requirements are:

Requirements		Hours	
15 semester hours of co the following:	oursework in studio art, chosen from		15
ART 350	Philosophy, Theory, and Criticism		3
ART 352J	Photography for Nonmajors		3
ART 352C	Painting for Nonmajors		3
ART 352D	Drawing for Nonmajors		3
ART 352E	Figure Drawing for Nonmajors		3
ART 352F	Print for Nonmajors		3
ART 352G	Sculpture for Nonmajors		3
ART 352K	Transmedia for Nonmajors		3
Please Note:			

Please Note:

All courses must be taken on the letter-grade basis.

# Courses

The faculty has approval to offer the following courses in the academic years 2018-2019 and 2019–2020; however, not all courses are taught each semester or summer session. Students should consult the *Course Schedule* (https://registrar.utexas.edu/schedules) to determine which courses and topics will be offered during a particular semester or summer session. The *Course Schedule* (https://registrar.utexas.edu/

schedules) may also reflect changes made to the course inventory after the publication of this catalog.

A full explanation of course numbers is given in *General Information* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/credit-value-and-course-numbers). In brief, the first digit of a course number indicates the semester hour value of the course. The second and third digits indicate the rank of the course: if they are 01 through 19, the course is of lower-division rank; if 20 through 79, of upper-division rank; if 80 through 99, of graduate rank.

# **Department of Art and Art History**

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

### Art History: ARH

#### **Lower-Division Courses**

#### ARH 301 (TCCN: ARTS 1301). Introduction to the Visual Arts.

A broad survey of selected traditions of art with an emphasis upon understanding their visual elements and cultural significance. Three lecture hours or two lecture hours and one discussion hour a week for one semester.

# ARH 302 (TCCN: ARTS 1303). Survey of Ancient through Medieval Art.

A study of selected visual works throughout the world from prehistoric time to 1400 CE. Three lecture hours or two lecture hours and one discussion hour a week for one semester.

# ARH 303 (TCCN: ARTS 1304). Survey of Renaissance through Modern Art.

A study of selected visual works throughout the world from 1400 CE to the present. Three lecture hours or two lecture hours and one discussion hour a week for one semester.

#### ARH 304. Issues in Visual Culture.

Restricted to majors in the Department of Art and Art History. Examines the modern and contemporary history of art and visual culture in relation to a broader set of problems fundamental to visual representation throughout the history of art. Three lecture hours or two lecture hours and one discussion hour a week for one semester.

#### ARH 314. Mexico City: Aztec to Modern.

Explores the building of Mexico City, sited in a lake bed surrounded by active volcanoes and tectonic activity, from the time of the Aztecs to the present. Addresses art, architecture, science, and engineering, as well as the role that art and archaeological museums have played in the capital's modern, urban identity. Three lecture hours a week for one semester.

#### ARH 119Q, 219Q, 319Q, 419Q, 519Q, 619Q, 719Q, 819Q, 919Q. Topics in Art History.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Art and Art History. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### ARH 321. Problems in Art Historical Research.

Restricted to art history majors. Focus on developing research skills. Introduction to critical analysis in the context of using various resources and primary materials. Three lecture hours a week for one semester.

# ARH 322. Issues in Exhibitions and Collections of Visual Arts.

Examines the histories and practices of collections and exhibitions in the visual arts. Three lecture hours a week for one semester.

#### ARH 325. Art and Archaeology of the Ancient Near East.

Examines various aspects of material culture, including the rise of monumentality and urbanism; media such as writing and figurative arts; and the history and politics of archaeological research in the area of the Fertile Crescent, Turkey, and Iran. Three lecture hours a week for one semester. Art History 325 and 361L (Topic: Art/Archeology of the Ancient Near East) may not both be counted.

#### ARH 326J. The Parthenon Through the Ages.

Examines why the Parthenon is of relevance today for a global audience. Subjects include the postantique lives of this unique monument as a Christian cathedral and pilgrimage site, a mosque, a ruin, and an archaeological icon; the various debates about its restoration and preservation; and the problem of cultural ownership. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 326J, 362 (Topic: Parthenon through the Ages), Classical Civilization 340 (Topic: Parthenon through the Ages).

# ARH 326K. Myth and Images in the Greek and Roman Mediterranean.

Examines various methods of interpretation, such as archaeological and art historical analysis of mythical Greek and Roman narratives as they appear in visual arts of antiquity. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 326K, 362 (Topic: Myth in Images in Classical Antiquity), Classical Civilization 340 (Topic: Myth in Images in Classical Antiquity).

#### ARH 326L. Visual Cultures of the Mediterranean Islands.

Analysis of material and visual culture and the divergent histories of archaeology and art history in Cyprus, Crete, and Sicily. Three lecture hours a week for one semester.

#### ARH 326M. Art and Archaeology of Greek Sanctuaries.

Examines the archaeology of Olympia, Delphi, Dodona, Delos, and Samos, their global relevance today, and the history of archaeological research. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 326M, 362 (Topic: Art and Archaeology of Greek Sanctuaries), Classical Civilization 340 (Topic: Art and Archaeology of Greek Sanctuaries).

#### ARH 326N. Hellenistic Art and Architecture.

Three lecture hours a week for one semester. Art of the Hellenistic period, from the reign of Alexander the Great to the beginning of the Roman Empire, ca. 336 to 31 BCE. Art History 326N and 327M may not both be counted.

#### ARH 327N. Art and Politics in Imperial Rome.

Same as Classical Civilization 340 (Topic 2). Public art of the Roman Empire from Augustus to late antiquity, ca. 31 BC to AD 350. Three lecture hours a week for one semester. Art History 327N and Classical Civilization 340 (Topic 2) may not both be counted. Prerequisite: Upperdivision standing.

#### ARH 327P. Roman Imperial Architecture.

Republican and imperial Roman architecture. Three lecture hours a week for one semester.

#### ARH 327R. Art in the Lives of Ordinary Romans.

Same as European Studies 347 (Topic 26). Art and architecture from the archaeological sites of Pompeii, Herculaneum, and Ostia as indices of Roman culture, 100 BC to AD 250. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 327R, European Studies 347 (Topic: Art in the Lives of Ordinary Romans), 347 (Topic 26).

#### ARH 327S. Art and Politics in Republican Rome.

The art and architecture of republican Rome, ca. 500-44 BCE, when the city established dominance in the Mediterranean and developed an artistic tradition that would flourish into the Empire. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 327S, 362 (Topic: Art and Politics in Republican Rome), Classical Civilization 340 (Topic: Art and Politics in Republican Rome), European Studies 347 (Topic: Art and Politics in Republican Rome).

#### ARH 327T. Art in the Age of Hadrian.

Examines art in Rome under the reign of emperor Hadrian (117-138), who inherited the empire at its greatest geographical extent. Three lecture hours a week for one semester.

#### ARH 328J. Arts of Islam, 650-1500.

Same as Religious Studies 358 (Topic 17). Early Islamic art and architecture, with an emphasis on interconnections between the Islamic world and Europe. Examines unique ways Islamic visual culture developed out of the classical and late antique world. Artworks will be contextualized within early Islamic history, religion, and culture. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 328J, 363 (Topic: Arts of Islam: Caliphs-Sultans), Islamic Studies 372 (Topic: Arts of Islam: Caliphs-Sultans), Middle Eastern Languages and Cultures 321 (Topic: Arts of Islam: Caliphs-Sultans), Middle Eastern Studies 321K (Topic: Arts of Islam: Caliphs-Sultans), 328 (Topic: Arts of Islam: Caliphs-Sultans), 342 (Topic: Arts of Islam: Caliphs-Sultans), Religious Studies 358 (Topic: Arts of Islam: Caliphs-Sultans), 358 (Topic 17).

#### ARH 328K. Arts of Islam 1500-Present.

Same as Religious Studies 358 (Topic 18). Later Islamic art and architecture, beginning with the world empires of the Ottomans, Safavids, and Mughals, and extending into the modern and contemporary periods. Subjects include the social and historical context of Islamic art in these periods and its unique visual culture. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 328K, 363 (Topic: Arts of Islam, 1500-1800), 363 (Topic: Arts of Islam: 1500-Present), Islamic Studies 372 (Topic: Arts of Islam, 1500-1800), 373 (Topic: Arts of Islam: 1500-Present), Middle Eastern Languages and Cultures 321 (Arts of Islam: 1500-Present), Middle Eastern Studies 321K (Topic: Arts of Islam, 1500-1800), 342 (Topic: Arts of Islam: 1500-Present), Religious Studies 358 (Topic 18).

#### ARH 329J. Byzantine Art.

Same as Religious Studies 357 (Topic 2). Examination of the medieval art and architecture of the eastern Roman empire, including related traditions (Coptic, Armenian, Georgian, Crusader, Norman). Three lecture hours a week for one semester. Art History 329J and Religious Studies 357 (Topic 2) may not both be counted.

#### ARH 329K. Early Medieval Art.

Architecture, sculpture, painting, and metalwork in western Europe from the third to the eleventh century. Three lecture hours a week for one semester.

#### ARH 329N. Art and Architecture of Late Antiquity.

Examination of early Christian and late Roman art and architecture, including related traditions, such as Jewish, Coptic, Armenian, Georgian, Persian, and Syriac. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 329N, 362R (Topic: Art and Architecture of Late Antiquity), Classical Civilization 340 (Topic: Art and Architecture of Late Antiquity).

#### ARH 329P. Medieval Italy.

Architecture, sculpture, painting, and metalwork in the Italian peninsula from the third to the fourteenth century, with a special focus on Rome, Venice, and Palermo. Three lecture hours a week for one semester.

#### ARH 129Q, 229Q, 329Q, 429Q, 529Q, 629Q, 729Q, 829Q, 929Q. Topics in Art History.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Art and Art History. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### ARH 329R. Romanesque Art and Architecture.

Same as European Studies 347 (Topic 28). Form and function of religious art in twelfth-century Europe. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 329R, European Studies 347 (Topic: Romanesque Art and Architecture), 347 (Topic 28).

#### ARH 330G. Art at Court: The Gothic Period.

Changing manifestations of Gothic art and architecture at selected court centers, 1140 to 1400. Three lecture hours a week for one semester.

#### ARH 330J. Gothic Cathedral: Amiens.

Same as European Studies 347 (Topic 30) and Religious Studies 357 (Topic 14). An examination of the cathedral at Amiens, its meaning, structure, political and financial contexts, and sculptural programs, as well as its influence on other buildings in France and Germany. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 330J, 374 (Topic: Gothic Cathedral: Amiens), European Studies 347 (Topic: Gothic Cathedral: Amiens), 347 (Topic 30), Religious Studies 357 (Topic: Gothic Cathedral: Amiens), 357 (Topic 14).

#### ARH 331J. Art and Experience in Central Italy.

Restricted to students admitted to the Learning Tuscany program. Art and architecture of central Italy. The equivalent of three lecture hours a week for one semester. Taught in Castiglion Fiorentino, Italy. Prerequisite: Consent of instructor.

#### ARH 331K. Early Italian Renaissance Art to 1470.

Same as European Studies 347 (Topic 29). This course traces the beginnings of the "rebirth" (renaissance) of the visual arts, from the end of the Middle Ages to the heyday of the Medici. Works of art are analyzed both in formal terms and in relation to contemporary society, religion, philosophy, economics, statecraft, gender, and other significant issues. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 331K, European Studies 347 (Topic: Early Italian Renaissance Art to 1470), 347 (Topic 29).

#### ARH 331L. High Renaissance Art.

Analyzes the key artistic works of the high Renaissance as part of an evolving language of style and form and in relation to the intellectual, social, and political context of the period. Three lecture hours a week for one semester.

#### ARH 331M. Mannerist and Early Baroque Art.

The art of western Europe from about 1520 to 1590. Emphasis on art in Italy, but developments in the northern countries are also considered. Three lecture hours a week for one semester.

#### ARH 331N. Later Quattrocento Art, 1470-1500.

Explores the visual arts created in the Italian peninsula during the final decades of the fifteenth century, or Quattrocento. Emphasis will be on common themes such as the revival of antiquity, the exaltation of the prince, and specific local characteristics. Three lecture hours a week for one semester.

#### ARH 331P. Art and the City in Renaissance Italy.

Same as Core Texts and Ideas 375 (Topic 4) and European Studies 347 (Topic 33). Art, architecture, and emerging civic identity in Florence, Siena, Venice, and other Italian Renaissance city-states. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 331P, 364 (Topic: Art and the City in Renaissance Italy), Core Texts and Ideas 375 (Topic: Art and the City in Renaissance Italy), 375 (Topic 4), European Studies 347 (Topic: Art and the City in Renaissance Italy), 347 (Topic 33), Italian Civilization 349 (Topic: Art and the City in Renaissance Italy), Western Civilization 320 (Topic: Art and the City in Renaissance Italy).

#### ARH 331Q. Art in Medici Florence.

Explores the social and cultural fabric of Florence before and after the rise to power of the Medici family beginning in the early fifteenth century. Three lecture hours a week for one semester.

#### ARH 332K. Northern Renaissance Art, 1350-1500.

Same as European Studies 347 (Topic 27) and Religious Studies 357 (Topic 7). Northern European art from the International Style to van Eyck and Hieronymus Bosch. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 332K, European Studies 347 (Topic: Northern Renaissance Art, 1350-1500), 347 (Topic 27), Religious Studies 357 (Topic: Northern Renaissance Art, 1350-1500), 357 (Topic 7).

#### ARH 332L. Northern Renaissance Art, 1500-1600.

Same as European Studies 347 (Topic 32) and Religious Studies 357 (Topic 6). Art and cultural development in the sixteenth century; artists include Duerer, Gruenewald, Holbein, and Brueghel. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 332L, European Studies 347 (Topic: Northern Renaissance Art, 1500-1600), 347 (Topic 32), Religious Studies 357 (Topic: Northern Renaissance Art, 1500-1600), 357 (Topic 6).

#### ARH 333K. Italian Baroque Art.

The art of Italy in the seventeenth and eighteenth centuries; includes the sixteenth-century sources from which Roman baroque developed. Three lecture hours a week for one semester.

# ARH 333L. The Age of Rembrandt and Rubens: Northern Baroque Art.

Same as European Studies 347 (Topic 31) and Religious Studies 357 (Topic 11). Northern European art in the seventeenth century, stressing the Netherlands and Flanders. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 333L, European Studies 347 (Topic: The Age of Rembrandt and Rubens:

Northern Baroque Art), 347 (Topic 31), Religious Studies 357 (Topic: The Age of Rembrandt and Rubens: Northern Baroque Art), 357 (Topic 11).

#### ARH 334. Eighteenth-Century European Art.

European painting, sculpture, and architecture as social and political events from the age of absolutism to the French Revolution. Three lecture hours a week for one semester.

#### ARH 335F. Art and the Moral Law.

Examines the revolutionary energy of 'Art for Art's Sake' in nineteenth century Europe and various artists' challenge to the moral law, especially in Britain and France. Three lecture hours a week for one semester.

#### ARH 335G. Art and Landscape 1778-1908.

In Europe, the arts of landscape (painting, gardening, poetry and the novel) flourished more creatively than ever in the period covered. Exploration of these arts, their intersections with each other, and across national boundaries. Three lecture hours a week for one semester.

#### ARH 335H. Buddhist Traditions and Nineteenth-Century Art.

Examines the extent to which Buddhism and Buddhist art influenced artists and Western culture in the nineteenth century, especially in the development of modernism. Three lecture hours a week for one semester.

#### ARH 335J. Nineteenth-Century Art.

Examines European art and themes in art during the nineteenth century. Three lecture hours a week for one semester.

#### ARH 335N. European Art, 1789-1848.

European painting and sculpture as social and political events from the French Revolution to the revolutionary crises of midcentury. Three lecture hours a week for one semester.

#### ARH 335P. European Art, 1848-1900.

European painting and sculpture as social and political events from the revolutions of 1848 to the turn of the century. Three lecture hours a week for one semester.

#### ARH 336D. Derek Jarman: Art and Film.

The place of Derek Jarman (1942-1994) in the history of film is assured, but he was also a painter, wrote memoirs, and created a famous garden. Discussion of all his works in the context of his life, British culture, and his HIV/AIDS status. Three lecture hours a week for one semester. Art History 336D and 366N (Topic: Derek Jarman: Art/Film-Making) may not both be counted.

#### ARH 337K. Twentieth-Century European Art to 1940.

Major movements in the development of modern European painting and sculpture. Three lecture hours a week for one semester.

#### ARH 338J. Performing Art History.

Uses the work of one seminal performance, film, video, and installation artist as a case study for considering the history of minimalism, video, and performance in the United States and Europe from the 1960s to the present and for developing ways of writing about time-based media in general. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 338J, 359 (Topic: Performing Art History), 366P (Topic: Performing Art History), Women and Gender Studies 345 (Topic: Performing Art History). Offered on the letter-grade basis only. Prerequisite: Upper-division standing.

#### ARH 338L. Art since 1930: Modernism and Mass Modernity.

Avant-garde activity, primarily painting, photography, and film, in the United States and Europe from 1930 to 1970. Three lecture hours a week for one semester.

#### ARH 338M. Art and Culture: 1968 and After.

Artistic and critical activity in the United States and Europe from 1968 to the present. Three lecture hours a week for one semester.

#### ARH 338N. Sculpture as Model in the Twentieth Century.

Examines the inherent problems in making and interpreting sculpture in the twentieth century in the United States and Europe. Three lecture hours a week for one semester.

#### ARH 338V. Magazine as Archive: View Magazine 1940-1947.

Considers the fate of avant-garde culture globally during World War II and its immediate aftermath through the lens of View Magazine and primary research conducted in the Harry Ransom Center. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 338V, 359 (Topic: Magazine as Archive: 1940-1947), 366P (Topic: Magazine as Archive: 1940-1947). Offered on the letter-grade basis only. Prerequisite: Upper-division standing.

#### ARH 339J. American Art: Colonial Era to the Civil War.

Painting, sculpture, and architecture from the early seventeenth century to 1860. Three lecture hours a week for one semester.

#### ARH 339K. American Art: Civil War to the Armory Show.

Painting, sculpture, and architecture from 1860 to 1913. Three lecture hours a week for one semester.

#### ARH 339L. Twentieth-Century American Art to the 1950s.

Art in the United States from the Armory Show through abstract expressionism. Three lecture hours a week for one semester.

#### ARH 339M. American Art, 1958-1985.

Survey of major movements from 1958 to 1985, from pop art to graffiti art and new expressionism. Three lecture hours a week for one semester.

#### ARH 339N. Painting in America to 1860.

Same as American Studies 325 (Topic 2). Painting in British colonial North America and the United States prior to the Civil War. Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 325 (Topic 2), Art History 339N, 374 (Topic 1).

#### ARH 339P. Painting in the United States, 1860-1913.

Same as American Studies 325 (Topic 3). Painting in the United States from the Civil War to the Armory Show. Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 325 (Topic 3), Art History 339P, 374 (Topic 2).

#### ARH 339Q. Modernism in American Design and Architecture.

Same as American Studies 330 and Urban Studies 352 (Topic 5). A historical survey of artifacts, buildings, and urban environments, focusing on responses to machine-age civilization. Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 330, Art History 339Q, Urban Studies 352 (Topic: Modernism in American Design and Architecture), 352 (Topic 5). Prerequisite: Upper-division standing.

#### ARH 339R. Art, Art History, and Medicine.

Examines similarities and differences between the discipline of art history and the types of visual training offered by medical schools in conjunction with museums. Builds observational skills necessary for both medicine and art history while remaining grounded in the methodologies and purposes of art history. Sharpens critical thinking skills about images and texts. Cultivates interdisciplinary collaboration in consideration of select examples of European and U.S. art, includingbut not limited to--medical or anatomical subjects. Three lecture hours a week for one semester.

#### ARH 340L. History of Photography.

The history of photography, including major historic processes, influential photographers, critical debates, and the significant social, political, and economic circumstances that shaped the development of the medium and the diverse works that were created since its origins in the nineteenth century. Three lecture hours a week for one semester. Art History 340L and 366N (Topic: History of Photography) may not both be counted.

#### ARH 341J. Nineteenth-Century Latin American Art.

Art of the nineteenth century in Latin America, including Argentina, Brazil, Colombia, Chile, Mexico, Paraguay, Peru, Uruguay, Venezuela, and the Caribbean. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 341J, 361 (Topic: Reframing the Nation: Nineteenth-Century Latin American Art), Latin American Studies 327 (Topic: Reframing the Nation: Nineteenth-Century Latin American Art).

#### ARH 341K. Modern Art of Mexico.

Same as Latin American Studies 327 (Topic 2). Mexican visual culture from the late nineteenth century through 1968. Emphasis on the emergence of modernist avant-gardes and popular entertainment, and their ambivalent relationship to state, church, and market. Also explores how self-consciously negotiating the tension between native and international influences, artists, critics, and curators contributes to notions of Lo Mexicano, or "Mexicanness." Three lecture hours a week for one semester. Art History 341K and Latin American Studies 327 (Topic 2) may not both be counted.

#### ARH 341L. Chicano Art Histories and Futures.

Same as Latin American Studies 327 (Topic 1). Mexican American art since the 1960s, with an emphasis on the visual production and exhibition of identity inside and outside the Chicano civil rights movement and the politics of U.S. multiculturalism. An introduction to a broad range of art history written to date--including recent feminist and queer interventions--as a means of envisioning a supposed "post-Chicano" or "post-racial" moment. Three lecture hours a week for one semester. Art History 341L and Latin American Studies 327 (Topic 1) may not both be counted.

#### ARH 341M. Contemporary Mexican Art.

Survey of visual culture beginning in the 1950s and 1960s, with a focus on key artists, exhibition spaces, and critical debates from the last thirty years in Mexico in light of international aesthetic currents and shifting political and economic conditions. Three lecture hours a week for one semester.

#### ARH 341N. Other Modernities: Latin American Art.

Development and sources of twentieth-century art in the Caribbean and Central and South America. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 341N, 361 (Topic: Other Modernities: Latin American Art), Latin American Studies 327 (Topic: Other Modernities: Latin American Art), Mexican American Studies 374 (Topic: Other Modernities: Latin American Art).

#### ARH 341P. Contemporary Latin American Art.

Development and sources of art in the Caribbean and Central and South America from the 1960s to the present. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 341P, 361 (Topic: Contemporary Latin American Art), Latin American Studies 327 (Topic: Contemporary Latin American Art).

#### ARH 341Q. Women in Latin American Art.

Development and sources of Latin American Women Artists considering feminist, gender and queer theories Three lecture hours a week for one semester. Only one of the following may be counted: Art History 341Q, 361 (Topic: From Modern to Conceptual: Women Artists in Latin America), Women's and Gender Studies 340 (Topic: From Modern to Conceptual: Women Artists in Latin America).

# ARH 341R. Apertures: Film and Photography Through Greater Mexico.

Exploration of the historical and aesthetic linkages and affinities between filmmakers and photographers working in greater Mexico, including prominent visitors and Americans of Mexican descent. Considers how Mexican culture is represented but also how borders between Mexico and the wider world-as well as among media--were blurred or brought into sharper focus by these exchanges. Three lecture hours a week for one semester. Art History 341R and 361 (Topic: Apertures: Film & Photo Mexico) may not both be counted.

# ARH 342J. Introduction to Women's and Gender Studies in the Fine Arts.

An introduction to women's studies and gender studies in relation to visual, theatrical, and musical culture in the United States and Europe. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 342J, 359 (Topic: Intro to Women's and Gender Studies in the Fine Arts), Fine Arts 350 (Topic: Intro to Women's and Gender Studies in the Fine Arts), Women's and Gender Studies 345 (Topic: Intro to Women's and Gender Studies in the Fine Arts).

#### ARH 344J. Twentieth-Century African American Art.

Same as African and African Diaspora Studies 374F (Topic 19). A survey of visual art produced by people of African descent in the United States with an emphasis on the twentieth century and its sociohistorical framework. Changes in modes of expression, formal concerns, pictorial themes, and the impact of the Black Arts movement, feminism, and Afrocentrism on art are explored, as well as the relationship of the work of black artists to art from West and Central Africa and the visual traditions of European and Euro-American artists. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 372E (Topic: Twentieth-Century African American Art), 374F (Topic: 20th-Century African American Art), 374F (Topic 19), Art History 344J, 366N (Topic: 20th-Century African American Art).

#### ARH 345J. Contemporary Artists of the African Diaspora.

Same as African and African Diaspora Studies 374F (Topic 15). Examines a wide range of artists, practicing in different parts of the world, who are part of the African diaspora via such factors as the Atlantic slave trade and various patterns of international migration. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Contemporary Artists of the African Diaspora), 374F (Topic 15), Art History 345J, 373D (Topic: Contemporary Artists of the African Diaspora), 374 (Topic: Contemporary Artists of the African Diaspora).

# ARH 345K. Contemporary British Artists of the African Diaspora.

Same as African and African Diaspora Studies 374F (Topic 14). A look at a wide range of artists, practicing in Britain, who are part of the African diaspora via such factors as the Atlantic slave trade and various patterns of international migration. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Contemporary British Artists of the African Diaspora), 374F (Topic 14), Art History 345K, 374 (Topic: Contemporary British Artists of the African Diaspora).

#### ARH 345L. Diaspora Visions.

Same as African and African Diaspora Studies 374F (Topic 13) and Women's and Gender Studies 340 (Topic 48). An exploration of border crossing by cultures and groups including Yorubas, Jews, Armenians, Tibetans, Hamish, Pakistanis, and Indians and the production of images by immigrants, exiles, and nomads in alien lands. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Diaspora Vision), 374F (Topic 13), Art History 345L, 373D (Topic: Diaspora Visions), 374 (Topic: Diaspora Vision), Women's and Gender Studies 340 (Topic: Diaspora Vision), 340 (Topic 48).

#### ARH 345M. Visual Arts of the Caribbean.

Same as African and African Diaspora Studies 374F (Topic 12). A look at a wide range of artists from the countries of the Caribbean, including examples of cinema and reggae music packaging. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 372G (Topic: Visual Arts of the Caribbean), 374F (Topic: Visual Arts of the Caribbean), 374F (Topic 12), Art History 345M, 373D (Topic: Visual Arts of the Caribbean), 374 (Topic: Visual Arts of the Caribbean).

#### ARH 346K. Introduction to African Art.

Same as African and African Diaspora Studies 374F (Topic 11). Investigates the lives and works of several artists who have made substantial contributions to the definition, history, and interpretation of the visual arts. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Introduction to African Art), 374F (Topic 11), Art History 346K, 373C (Topic: Introduction to African Art), 374 (Topic: Introduction to African Art), Women's and Gender Studies 340 (Topic: Introduction to African Art).

#### ARH 346L. Africana Women's Art.

Same as African and African Diaspora Studies 374F (Topic 9) and Women's and Gender Studies 340 (Topic 46). Analysis of the diverse modes of presentation, mediums, definitions, and influences of Africana women artists in the diaspora. Designed to use critical theory and art history found in oral and written literatures, music, films, and other formal and informal documents. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Africana Women's Art), 374F (Topic 9), Art History 346L, 373C (Topic: Africana Women's Art), Women's and Gender Studies 340 (Topic: Africana Women's Art), 340 (Topic 46). Prerequisite: Upper-division standing.

#### ARH 346M. Visual Cultures of Africa.

Same as African and African Diaspora Studies 374F (Topic 10). Painting, textiles, ceramics, sculpture, performance, mixed media, photography, films, and the aesthetic ideas behind the production of African visual cultures from the perspectives of rituals, rites of passage, celebrations, initiations, documentations, and expressions. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Visual Cultures of Africa), 374F (Topic 10), Art History 346M, 373C (Topic: Visual Cultures of Africa).

#### ARH 347J. Preclassic Mesoamerican Art and Civilization.

Introduction to the origins and earliest developments in Mesoamerican art, architecture, and civilization, with emphasis on the social context of

art and visual culture in preclassic Mesoamerica. Three lecture hours a week for one semester.

#### ARH 347K. Art and Archaeology of Ancient Peru.

Same as Latin American Studies 327 (Topic 6). The growth of civilization in South America from the earliest decorated textiles, pottery, and ceremonial buildings to the imperial Inca style. Three lecture hours a week for one semester. Art History 347K and Latin American Studies 327 (Topic 6) may not both be counted.

#### ARH 347L. Mesoamerican Art and Culture.

Same as Latin American Studies 327 (Topic 3). Mesoamerican art, architecture, and its archaeological context, with emphasis on the social function of art and visual culture in ancient Mesoamerica up to the time of European contact. Three lecture hours a week for one semester. Art History 347L and Latin American Studies 327 (Topic 3) may not both be counted.

#### ARH 347M. Maya Art and Architecture.

Same as Latin American Studies 327 (Topic 5). Introduction to the artistic traditions of the ancient Maya, tracing their development up to the time of European contact. Students will examine various important themes of Maya culture including history, ritual, and cosmology as revealed in sculpture, hieroglyphs, painting, and architectural design. Three lecture hours a week for one semester. Art History 347M and Latin American Studies 327 (Topic 5) may not both be counted.

#### ARH 347N. Aztec Art and Civilization.

An introduction to the art, symbolism, and visual culture of the ancient Aztecs. Subjects include the representations of history and mythology in architecture, stone monuments, and pictorial manuscripts. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 347N, 370 (Topic: Aztec Art and Civilization), Latin American Studies 327 (Topic: Aztec Art and Civilization).

#### ARH 347P. Mesoamerican Writing Systems.

Examines the scripts of ancient Mesoamerica, focusing mostly on Maya and Aztec hieroglyphic writing. Subjects include methods of decipherment, the visual encoding of language in art and script, and the cultures of literacy in precolumbian Mesoamerica. Three lecture hours a week for one semester.

#### ARH 348K. Formation of Indian Art, 1000 BCE to 1000 CE.

Examines the artistic traditions of South Asia up to the fifth century C.E., with an emphasis on social and religious factors shaping its development. Three lecture hours a week for one semester.

#### ARH 348L. Later Indian Art.

Examines the development of artistic and architectural traditions in South Asia from the fifth through fourteenth centuries with an emphasis on their social and religious significance. Three lecture hours a week for one semester.

#### ARH 348M. The Taj Mahal and the Diversity of Indian Art.

Same as Religious Studies 341 (Topic 9). Examination of the period when Islamic dynasties controlled much of the subcontinent and how a unique mix of forms and cultural practices shaped the development of monuments such as the Taj Mahal. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 348M, 372 (Topic: The Taj Mahal and the Diversity of Indian Art), Asian Studies 372 (Topic: The Taj Mahal and the Diversity of Indian Art), Religious Studies 341 (Topic 9). Prerequisite: Upper-division standing.

#### ARH 348N. Buddhist Art.

Same as Asian Studies 372 (Topic 24) and Religious Studies 341 (Topic 8). Explores the development of Buddhist art in South Asia, the land of its origin as well as its spread elsewhere. Focus on the question of "what is" Buddhist art. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 348N, 372 (Topic: Buddhist Art), Asian Studies 372 (Topic 24), Religious Studies 341 (Topic 8).

#### ARH 348P. Art in the Himalayas.

Examines developments in various Himalayan regions, such as Tibet and Nepal, by focusing on certain subjects and styles in order to comprehend the roles of art in shaping culture and society. Three semester hours a week for one semester.

#### ARH 349K. Traditional Chinese Art and Culture.

Examines Chinese art and culture from prehistory to the eighteenth century. Subjects include Chinese painting, calligraphy, sculpture, and architecture in their historical setting. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 349K, 372 (Topic: Traditional Chinese Art and Culture), 374 (Topic: Traditional Chinese Art and Culture), Asian Studies 372 (Topic: Traditional Chinese Art and Culture).

#### ARH 349L. Contemporary Chinese Art.

Same as Asian Studies 372 (Topic 45). Examines Chinese art and visual culture from the early twentieth century to the present. Analyzes complex issues involving modern and contemporary art scenes in China through artworks, artists' lives, and sociopolitical changes in China during this period. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 349L, 372 (Topic: Contemporary Chinese Art), Asian Studies 372 (Topic: Contemporary Chinese Art), 372 (Topic 45).

#### ARH 359. Topics in Feminism and Gender.

An introduction to feminist and gender theories in relation to issues concerning visual representation. Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### ARH 360L. Topics in the History of Photography.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### ARH 361. Topics in Latino and Chicano Art.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### ARH 361L. Topics in Ancient Near Eastern Art.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### ARH 362. Topics in Greek and Roman Art.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### ARH 362R. Topics in the Art of Late Antiquity.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### ARH 363. Topics in Medieval Art.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### ARH 364. Topics in Renaissance Art.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### ARH 365. Topics in Baroque Art.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### ARH 366J. Topics in Nineteenth-Century Art.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### ARH 366N. Topics in Twentieth-Century Art.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### ARH 366P. Topics in Modernism.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### ARH 367. Topics in the Art of North America.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### ARH 370. Topics in Pre-Columbian Art.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### ARH 370J. Study in Guatemala.

Art and architecture of Guatemala. The equivalent of three lecture hours a week for one semester. Taught in Guatemala. May be repeated for credit when the topics vary. Prerequisite: Consent of instructor.

Topic 1: Ancient Maya Writing and History.

Topic 2: Sacred Landscapes of the Precolumbian World. Topic 3: Baroque Art and Architecture in Spanish America.

#### ARH 372. Topics in the Art of Asia.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

Topic 1: Chinese Literati Art. Same as Asian Studies 372 (Topic 42). Only one of the following may be counted: Art History 372 (Topic: Chinese Literati Art), 372 (Topic 1), Asian Studies 361 (Topic: Chinese Literati Art), 372 (Topic 42).

#### ARH 373C. Topics in Africana Art.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### ARH 373D. Topics in Diaspora Art.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### ARH 373E. Topics in African American Art.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### ARH 374. Special Topics in the History of Art.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

**Topic 3: Colonial Encounter.** 

#### ARH 375. Theories and Methods in the History of Art.

Restricted to art history majors. Examination of the theories and methods used by art historians and the changing nature of art historical inquiry. Three lecture hours a week for one semester. Prerequisite: Upperdivision standing in art history, Art History 321 with a grade of at least C, and consent of the departmental undergraduate adviser.

#### ARH 376. Reading Tutorial in Art History Problems.

Individual projects to be completed under faculty supervision. The equivalent of three lecture hours a week for one semester. May be repeated for credit. Prerequisite: For majors in the Department of Art and Art History, six semester hours of upper-division art history, a grade point average of at least 3.00, and consent of instructor; for others, a grade point average of at least 3.00, and consent of instructor.

#### ARH 379H. Thesis Course for Departmental Honors.

Individual conference course in which student researches and writes a thesis. The equivalent of three lecture hours a week for one semester. Prerequisite: Admission to the Honors Program in Art History, and approval of the honors adviser.

### **Studio Art: ART**

#### **Lower-Division Courses**

#### ART 301C. Core Studio I: Surface, Image, and Practice.

Restricted to art history, design, studio art, and visual art studies majors. Required core studio class with emphasis on creating planar works and exploring formal principles and conceptual concerns through work in traditional and digital media. Collaborative and technologybased projects will allow students to envision and understand planar works in a contemporary context. If there are spaces available on the fourth class day in the spring or fall semester or the second class day in either summer session, non-departmental majors may register for undergraduate studio art classes. Prior experience in the subject is expected. Six laboratory hours a week for one semester. Offered on the letter-grade basis only.

#### ART 302C. Core Studio II: Line, Mark, and Observation.

Restricted to art history, design, studio art, and visual art studies majors. Required core studio class with an emphasis on traditional and digital drawing. Focus on line, line weight, continuous line, contour line, sighting, figure, gesture, perspective (two point, three point, and isometric/orthogonal drawing), value, color, and texture. Collaborative and technology-based projects will allow students to envision and understand drawing in a contemporary context. If there are spaces available on the fourth class day in the spring or fall semester or the second class day in either summer session, non-departmental majors may register for undergraduate studio art classes. Prior experience in the subject is expected. Six laboratory hours a week for one semester. Offered on the letter-grade basis only.

#### ART 303C. Core Studio III: Space, Time, and Process.

Restricted to art history, design, studio art, and visual art studies majors. Required core studio class with an emphasis on creating spatial and time-based works and exploring formal principles and conceptual concerns. Working with space, time, structure, process, and material. Collaborative and technology-based projects will allow students to envision and understand drawing in a contemporary context. If there are spaces available on the fourth class day in the spring or fall semester or the second class day in either summer session, non-departmental majors may register for undergraduate studio art classes. Prior experience in the subject is expected. Six laboratory hours a week for one semester. Offered on the letter-grade basis only.

#### ART 310P. Introduction to Print.

Introduction to the concepts, methods, and materials of print including a combination of intaglio, relief, lithography, serigraphy, and/or book arts. Six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 301C and 302C (or 303K, 303L, 304K, and 304L), with a grade of at least C in each; for others, consent of instructor.

#### ART 311K (TCCN: ARTS 2316). Painting I.

Introduction to painting techniques, composition, and exploration of personal expression. Six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 301C and 302C (or 303K, 303L, 304K, and 304L), with a grade of at least C in each; for others, consent of instructor.

#### ART 313K (TCCN: ARTS 2326). Beginning Sculpture.

Introduction to the processes involved in the production of objectoriented sculpture using direct methods of hot and cold construction. Six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 301C and 302C (or 303K, 303L, 304K, and 304L), with a grade of at least C in each; for others, consent of instructor.

#### ART 315K (TCCN: ARTS 1317). Beginning Drawing.

Exploration of various methods, subjects, and expressive possibilities in drawing. Six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 301C and 302C (or 303K, 303L, 304K, and 304L), with a grade of at least C in each; for others, consent of instructor.

#### ART 316K (TCCN: ARTS 2323). Beginning Life Drawing.

Problems in drawing and construction of the human figure in selected media. Six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 301C and 302C (or 303K, 303L, 304K, and 304L), with a grade of at least C in each; for others, consent of instructor.

#### ART 316V. Transmedia: Expanded Media I.

Introduction to video, digital, net.art, and multiple media art forms with an emphasis on experimentation and a DIY approach to production. Focuses on the history, theory, and evolution of media art practices and their relation to the Internet and social media networks. Six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 301C and 302C (or 303K, 303L, 304K, and 304L), with a grade of at least C in each; for others, consent of instructor.

#### ART 317C. Transmedia: Performance Art I.

An introduction to the practice, history, and theory of performance art in a variety of contexts and spaces, including theatrical, the white cube, and the workaday world. Six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 301C and 302C (or 303K, 303L, 304K, and 304L), with a grade of at least C in each; for others, consent of instructor.

#### ART 317K (TCCN: ARTS 2356). Beginning Photography.

An introduction to still photography, including basic technical skills and concepts. Six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 301C and 302C (or 303K, 303L, 304K, and 304L), with a grade of at least C in each; for others, consent of instructor.

#### ART 318C. Transmedia: Digital Time-Art I.

Study in digital video, sound, and animation, with emphasis on the exploration of movement, image, and montage. Guided inquiry into pertinent conceptual, perceptual, and practical skills. Six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 301C and 302C (or 303K, 303L, 304K, and 304L), with a grade of at least C in each; for others, consent of instructor.

#### ART 119Q, 219Q, 319Q, 419Q, 519Q, 619Q, 719Q, 819Q, 919Q. Topics in Studio Art.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Art and Art History. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### ART 319T. Topics in Studio Art: Laboratory.

Intensive study of various disciplines of studio art. Six laboratory hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: For design, studio art, and visual art studies majors, Studio Art 301C and 302C (or 303K, 303L, 304K, and 304L), with a grade of at least C in each; for others, consent of instructor.

#### **Upper-Division Courses**

#### ART 320F. Digital Fabrication I.

Restricted to art history, design, studio art, and visual art studies majors. Study of the artistic culture and techniques associated with digital visualization, three dimensional data acquisition, and various forms of digital fabrication including 3D Printing, CNC Milling, and Laser Cutting. Six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Studio Art 301C and 302C (or 303K, 303L, 304K, and 304L), with a grade of at least C in each.

#### ART 320K. Topics in Studio Art.

Six laboratory hours a week for one semester. May not be counted toward a degree in the Department of Art and Art History. May be repeated for credit when the topics vary.

#### ART 320L. Topics in Studio Art.

Continuation of Studio Art 320K. Six laboratory hours a week for one semester. May not be counted toward a degree in the Department of Art and Art History. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and Studio Art 320K with a grade of at least C.

#### ART 321K. Painting II.

Problems in composition and exploration of personal expression. Six laboratory hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 311K with a grade of at least C; for others, consent of instructor.

#### ART 322K. Intermediate Drawing.

Continuation of Studio Art 315K. Six laboratory hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 315K with a grade of at least C; for others, consent of instructor.

#### ART 323K. Intermediate Sculpture.

Exploration of the concepts and processes involved in the production of object-oriented sculpture, with emphasis on indirect methods of moldmaking and casting. Encourages individual direction. Six laboratory hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 313K with a grade of at least C; for others, consent of instructor.

#### ART 323S. Installation Sculpture.

Exploration of the theories and methods involved in the production of installation sculpture through the investigation of form and space and of their function in transforming environmental, architectural, or invented sites. Six laboratory hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 313K with a grade of at least C; for others, consent of instructor.

#### ART 325G. Intermediate Print: Serigraphy.

Practice in the theories and techniques of multicolor serigraphy and photoserigraphy. Six laboratory hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 310P (or 319G) with a grade of at least C; for others, consent of instructor.

#### ART 325J. Intermediate Print: Relief.

Instruction in relief print processes in conjunction with digital technologies. Utilization of laser cutters, CNC routers, and large-format photo printers as well as traditional techniques to generate dynamic projects in woodcut, linocut, and more. Emphasis on contemporary print practice in the expanded field. Six laboratory hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 310P with a grade of at least C; for others, consent of instructor.

#### ART 325K. Intermediate Print: Intaglio.

Instruction in the theories and techniques of intaglio printmaking, color, assemblage, stencil, viscosity, collography, photo process, and relief. Six laboratory hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 310P (or 319K) with a grade of at least C; for others, consent of instructor.

#### ART 325M. Intermediate Print: Lithography.

Instruction in the theories and techniques of metal plate, multicolor, and stone lithography and photolithography. Six laboratory hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 310P (or 319M) with a grade of at least C; for others, consent of instructor.

#### ART 129Q, 229Q, 329Q, 429Q, 529Q, 629Q, 729Q, 829Q, 929Q. Topics in Studio Art.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Art and Art History. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### ART 330P. Advanced Print Workshop.

Focuses on the concepts and practice of print. Six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 310P with a grade of at least C, and one of the following with a grade of at least C: Studio Art 325J, 325K, 325G, or 325M; for others, consent of instructor.

#### ART 335K. Intermediate Photography.

Practice in still photography, including materials and processes. Six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 317K with a grade of at least C; for others, consent of instructor.

#### ART 336V. Transmedia: Expanded Media II.

Advanced practice of media art exploring time, space, and reality through multidimensional forms. An investigation of media technologies and networks: aesthetically, formally, theoretically or conceptually using traditional media, new media, and immaterial approaches. Six laboratory hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 301C and 302C (or 303K, 303L, 304K, and 304L) with a grade of at least C in each; for others, consent of instructor.

#### ART 337C. Transmedia: Performance Art II.

Advanced workshop in performance art that focuses on the development of researched solo and collaborative projects. Six laboratory hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the letter-grade basis only.

#### ART 338C. Transmedia: Digital Time-Art II.

Study in digital video, sound, and animation, with emphasis on the exploration of cinematic time and its time-based installation. Guided inquiry into the relationship between video and video projections, and technics and technology. Six laboratory hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the letter-grade basis only.

#### ART 340F. Digital Fabrication II.

Restricted to art history, design, studio art, and visual art studies majors. Advanced study of the artistic culture and techniques associated with digital visualization, three dimensional data acquisition, and various forms of digital fabrication including 3D Printing, CNC Milling, and Laser Cutting. Six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Studio Art 320F and twelve additional hours of studio credit, with a grade of at least C in each.

#### ART 341K. Painting III.

Continuation of Studio Art 321K. Six laboratory hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 321K with a grade of at least C; for others, consent of instructor.

#### ART 346K. Intermediate Life Drawing.

Advanced problems in drawing and construction of the human figure. Six laboratory hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 316K with a grade of at least C; for others, consent of instructor.

#### ART 350. Philosophy, Theory, and Criticism.

Advanced exploration of philosophy, theory, and criticism from a studio art perspective. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 301C and 302C (or 303K, 303L, 304K, and 304L), with a grade of at least C in each; for others, consent of instructor.

#### ART 350C. The New Color.

A study of color through the lenses of science, technology, psychology, arts, design and popular culture. Exploration of color using thought experiments, written analysis, tools for independent inquiry with creative research projects, collaborative teamwork exercises, and hands-on experiments. Three lecture hours or two lecture hours and one lab/ discussion a week for one semester. Offered on the letter-grade basis only.

#### ART 350M. Topics in Studio Art Practice.

Six laboratory hours a week for one semester. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

#### ART 350N. Topics in Studio Art Lecture.

Three hours once a week for one semester. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

#### **ART 350P. Professional Practices.**

Exploration of professional practices as they relate to the field of visual arts. Focus on writing an artist statement and resume, as well as learning about writing and applying for exhibition, grant, and residency opportunities. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 301C and 302C (or 303K, 303L, 304K, and 304L), with a grade of at least C in each; for others, consent of instructor.

#### ART 350S. Senior Studio.

Restricted to studio art majors. Studio course inclusive of all degree paths which culminates in a senior exhibition. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: At least ninety hours of coursework; and the following coursework with a grade of at least C: Studio Art 301C, 302C, and 303C (or 303K, 303L, 304K, and 304L).

#### ART 350T. Degree Track Perspectives Studio.

Restricted to studio art majors. Required degree track critique course placing an emphasis on conceptual development, practice, and critique within any given degree track. Six laboratory hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: The following with a grade of at least C: Studio Art 301C, 302C, and 303C; (or 303K, 303L, 304K, and 304L).

#### ART 351H. Senior Studio Honors.

Restricted to BFA Studio majors with senior standing in the BFA Studio Honors Standing. Honors studio class (that meets with ART 350S) inclusive of all tracks and culminating in a thesis report and a body of work to be exhibited in the senior thesis exhibition. Six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Completion of thirty hours of upper-division studio art.

#### ART 352C. Painting for Nonmajors.

Restricted to non-department of art and art history majors. Exploration of various methods, subjects, and expressive possibilities in painting. Six laboratory hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the letter-grade basis only.

#### ART 352D. Drawing for Nonmajors.

Restricted to non-department of art and art history majors. Exploration of various methods, subjects, and expressive possibilities in drawing. Six laboratory hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the letter-grade basis only.

#### ART 352E. Figure Drawing for Nonmajors.

Restricted to non-department of art and art history majors. Exploration of the human figure in selected media. Six laboratory hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the letter-grade basis only.

#### ART 352F. Print for Nonmajors.

Restricted to non-department of art and art history majors. Exploration of the concepts, methods, and materials of print. Six laboratory hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the letter-grade basis only.

#### ART 352G. Sculpture for Nonmajors.

Restricted to non-department of art and art history majors. Exploration of the processes involved in the production of object-oriented sculpture. Six laboratory hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the letter-grade basis only.

#### ART 352J. Photography for Nonmajors.

Restricted to non-department of art and art history majors. Exploration of still photography. Six laboratory hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the lettergrade basis only.

#### ART 352K. Transmedia for Nonmajors.

Restricted to non-department of art and art history majors. Exploration of time-based media. Six laboratory hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the letter-grade basis only.

#### ART 355. Studio Projects.

Restricted to studio art and visual art studies majors. Study of specific techniques or problems. Six laboratory hours a week for one semester. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: Upper-division standing; Studio Art 301C, 302C, and 303C (or 303K, 303L, 304K, and 304L) with a grade of at least C in each; and twelve additional semester hours of coursework in studio art with a grade of at least C in each course.

Topic 1: Design Issues. Offered on the letter-grade basis only. Topic 2: Installation of Film Art. Offered on the letter-grade basis only. Topic 3: Monoprinting and Relief Printing. Offered on the letter-grade basis only.

#### ART 356V. Transmedia: Expanded Media III.

Student-initiated research and development of complex media art and hybrid media art projects. Six laboratory hours a week for one semester. May be taken three times for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 336V with a grade of at least C; for others, consent of instructor.

#### ART 357C. Transmedia: Performance Art III.

Advanced independent inquiry into the development of performance art projects requiring focused research and time. Six laboratory hours a week for one semester. May be taken three times for credit. May be repeated for credit. Offered on the letter-grade basis only.

#### ART 358C. Transmedia: Digital Time-Art III.

Advanced study in video, sound, and animation with an emphasis on individual research reflecting students' artistic goals. Six laboratory hours a week for one semester. May be taken three times for credit. May be repeated for credit. Offered on the letter-grade basis only.

#### ART 361K. Painting IV.

Continuation of Studio Art 341K. Six laboratory hours a week for one semester. May be taken three times for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 341K with a grade of at least C; for others, consent of instructor.

#### ART 363K. Advanced Sculpture.

Advanced research in the theory, technology, and methods involved in the production of sculpture, with emphasis on individual direction. Six laboratory hours a week for one semester. May be taken three times for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 323K or 323S with a grade of at least C; for others, consent of instructor.

#### ART 366K. Advanced Life Drawing.

Problems in drawing and construction of the human figure. Six laboratory hours a week for one semester. May be taken three times for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 346K with a grade of at least C; for others, consent of instructor.

#### ART 368N. Advanced Drawing.

Continuation of Studio Art 322K. Six laboratory hours a week for one semester. May be taken three times for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 322K with a grade of at least C; for others, consent of instructor.

#### ART 372K. Advanced Photography.

Practice in photography with an emphasis on long-term photographybased projects, more advanced technical knowledge, and a deeper familiarity with uses of the medium. Six laboratory hours a week for one semester. May be taken three times for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 317K and 335K with a grade of at least C in each; for others, consent of instructor.

#### ART 376. Independent Study: Studio Art.

Restricted to studio art and visual art studies majors. Individual projects to be completed under faculty supervision. The equivalent of six laboratory hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: Completion of at least fifteen semester hours of upperdivision coursework in studio art, a grade point average of at least 3.00 in upper-division studio art, and consent of the studio assistant chair of the department.

#### ART 376K. Contemporary Issues in Photography.

Inquiry of specific themes in photography which can include: photographic intervention, photography since 1945, photo book making, abstraction in photography, appropriation in photography, and lighting for photography. Six laboratory hours a week for one semester. May be taken three times for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: For studio art and visual art studies majors, Studio Art 317K and 335K with a grade of at least C in each; for others, consent of instructor.

#### ART 179S, 379S. Advanced Topics in Studio Art: Lecture.

Restricted to design, studio art, and visual art studies majors. Intensive advanced study of various disciplines of studio art. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: For Studio Art 179S, upper-division standing; Studio Art 301C and 302C, (or 303K, 303L, 304K, and 304L) with a grade of at least C in each; concurrent enrollment in Studio Art 279T; and twelve additional semester hours of coursework in studio art with a grade of at least C in each course; for 379S, upper-division standing; Studio Art 301C and 302C, (or 303K, 303L, 304K, and 304L) with a grade of at least C in each; and twelve additional semester hours of coursework in studio art with a grade of at least C in each; and twelve additional semester hours of coursework in studio art with a grade of at least C in each course.

#### Topic 1: Game Development Capstone: Two-Dimensional Games.

Introduction to concepts and skills for game development in a twodimensional game format. Studio Art 179S, 379S (Topic: Game Development Capstone: Two-Dimensional Games) and 179S, 379S (Topic 1) may not both be counted.

#### ART 279T, 379T. Advanced Topics in Studio Art: Laboratory.

Restricted to design, studio art, and visual art studies majors. Intensive advanced study of various disciplines of studio art. The equivalent of three or six laboratory hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: For Studio Art 279T, upperdivision standing; Studio Art 301C and 302C (or 303K, 303L, 304K, and 304L), with a grade of at least C in each; concurrent enrollment in Studio Art 179S; and twelve additional semester hours of coursework in studio art with a grade of at least C in each course; for Studio Art 379T, upperdivision standing; Studio Art 301C and 302C (or 303K, 303L, 304K, and 304L), with a grade of at least C in each course; for Studio Art 379T, upperdivision standing; Studio Art 301C and 302C (or 303K, 303L, 304K, and 304L), with a grade of at least C in each; and twelve additional semester hours of coursework in studio art with a grade of at least C in each; and twelve additional semester hours of coursework in studio art with a grade of at least C in each; and twelve additional semester hours of coursework in studio art with a grade of at least C in each; and twelve additional semester hours of coursework in studio art with a grade of at least C in each course.

### **Visual Art Studies: VAS**

#### **Lower-Division Courses**

#### **Upper-Division Courses**

#### VAS 320. Exploring Objects, Spaces, and Meaning.

Open to all students. Focuses on a broad range of historical and contemporary works, artifacts, and environments, and their implications for understanding imagery and objects in visual and material culture. Three lecture hours a week for one semester. May not be repeated for credit. Offered on the letter-grade basis only.

#### VAS 321C. Children's Artistic Development I.

Examination of how arts based learning strategies can be used to promote inquiry into the world around us. One lecture hour and three laboratory hours a week for one semester. Visual Art Studies 321C and 121D may not both be counted. Offered on the letter-grade basis only.

#### VAS 322C. Children's Artistic Development II.

Advanced examination of how arts based learning strategies can be used to promote inquiry into the world around us. One lecture hour and three laboratory hours a week for one semester. Visual Art Studies 322C and 122D may not both be counted. Offered on the letter-grade basis only.

#### VAS 330. Introduction to Visual Art Studies.

An introduction to visual art studies: philosophy, current trends, instructional methods, evaluation, advocacy, and careers in art education, museum education, and cultural or social educational settings. Three lecture hours a week for one semester. Observation required outside of class hours. Offered on the letter-grade basis only. Prerequisite: For majors in the department of art and art history, Studio Art 301C and 302C (or 303K, 303L, 304K, and 304L) with a grade of at least C in each; for others, consent of instructor.

# VAS 341C. Learners and Instructional Sites for Visual Art Studies.

Restricted to visual art studies majors. Instructional procedures, observations, and evaluation of early childhood through grade twelve classroom and community-based art instruction. Six laboratory hours a week for one semester. Field observation required. Visual Art Studies 341C and 141D may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit with a grade of at least B or registration for Visual Art Studies 330.

#### VAS 351C. Art Materials, Techniques, and Processes.

Restricted to visual art studies majors. Exploration and application of basic materials, techniques, and processes in art production used in early childhood through grade twelve classroom and community-based art instruction. Six laboratory hours a week for one semester. Visual Art Studies 351C and 151D may not both be counted. Offered on the letter-grade basis only. Prerequisite: Visual Art Studies 330 with a grade of at least B.

#### VAS 361C. Criticism and Conversation about Art.

Restricted to visual art studies majors. Individual and professional evaluations of visual imagery, artifacts, and artistic production in a variety of settings. Six laboratory hours a week for one semester. Visual Art Studies 361C and 161D may not both be counted. Offered on the letter-grade basis only. Prerequisite: Visual Art Studies 351C with a grade of at least B.

#### VAS 371C. Topics in Visual Art Studies.

Lectures on selected subjects in visual art. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: For majors in the department of art and art history, upper-division standing; for others, consent of instructor.

#### VAS 376. Independent Study: Visual Art Studies.

Individual projects to be completed under faculty supervision. The equivalent of three lecture hours a week for one semester. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: Upper-division standing in the Department of Art and Art History and consent of instructor.

#### VAS 379S. Advanced Topics in Visual Art Studies: Lecture.

Three class hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: For majors in the Department of Art and Art History, upper-division standing; for others, upper-division standing and consent of instructor.

## **Department of Theatre and Dance**

Registration with a member of the department faculty is required of students planning to major in the Department of Theatre and Dance and of those enrolling in courses that require faculty permission.

All students majoring in the department are required to act in productions or to serve on technical crews as scheduled by the faculty of the department.

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

### Theatre and Dance: T D

### **Lower-Division Courses**

#### T D 301 (TCCN: DRAM 1310). Introduction to Theatre.

Open to all University students except majors in the Department of Theatre and Dance. A study of theatrical texts and practices of the past and present. Three lecture hours a week for one semester; attendance at all major productions of the department is required.

#### T D 102T, 202T, 302T. Topics in Dance Technique.

Fundamental study of principles and vocabulary of dance. One, two, or three lecture hours a week for one semester. May not be counted toward the Bachelor of Fine Arts degree with a major in dance. May be repeated for credit when the topics vary.

**Topic 1: Ballet I.** A study of the elements of classical ballet through exploration of movement principles as defined by traditional ballet technique. Only one of the following may be counted: Theater and Dance 302T (Topic: Ballet I), 302T (Topic: Topics in Dance: Ballet I-Nonmajors), 302T (Topic 1).

**Topic 2: Ballet II.** A continuation of the study of the elements of classical ballet through exploration of movement principles as defined by traditional ballet technique. Only one of the following may be counted: Theater and Dance 302T (Topic: Ballet II), 302T (Topic: Topics in Dance: Ballet II-Nonmajors), 302T (Topic 2).

**Topic 3: Modern I.** A study of the multiple aspects of modern dance technique including Humphrey-Limon, Release Technique, Laban Movement Analysis, and Bartenieff Fundamentals. Only one of the following may be counted: Theater and Dance 302T (Topic: Modern I), 302T (Topic: Topics in Dance: Modern-Nonmajors), 302T (Topic 3). **Topic 4: Modern II.** A continuation of the study of the multiple aspects of modern dance technique as developed in Modern I. Theatre and Dance 102T (Topic 4), 202T (Topic 4), 302T (Topic 4) and 112T (Topic: Modern Dance II), 212T (Topic: Modern Dance II), 312T (Topic: Modern Dance II), may not both be counted.

**Topic 5: Jazz I.** An introduction to four styles of twentieth and twentyfirst century jazz dance through exploration of the fundamental principles of movement with a parallel study of the historical development of the jazz dance aesthetic. Theatre and Dance 102T (Topic: Jazz I), 202T (Topic: Jazz I), 302T (Topic: Jazz I), and 102T (Topic 5), 202T (Topic 5), 302T (Topic 5) may not both be counted. **Topic 6: Jazz II.** A continuation of the study of jazz dance as developed in Jazz I.

**Topic 7: Afro-Contemporary Dance**. The study of contemporary dance informed by African aesthetics and vernacular movement found throughout the African diaspora. Theatre and Dance 302T (Topic: Afro-Contemporary Dance Techn) and 302T (Topic 7) may not both be counted.

Topic 8: Improvisational Dance. The study and practice of improvisational dance. Theatre and Dance 302T (Topic: Improvisational Dance) and 302T (Topic 8) may not both be counted. Topic 9: Yoga for Dance. The study of yoga as it pertains to movement in dance. Theatre and Dance 302T (Topic: Yoga for Dance) and 302T (Topic 9) may not both be counted.

**Topic 10: Yoga: Moving into Stillness.** A study of yoga in order to develop the ability to coordinate movement and breathing in dance.

#### T D 303. Fundamentals of Acting.

Not open to theatre and dance majors. Basic principles of acting and practical work in scenes from plays. Three lecture hours a week for one semester. Theatre and Dance 303 and 313C may not both be counted.

#### T D 303C (TCCN: DRAM 2336). Training the Speaking Voice.

Restricted to non-theatre and dance majors. Exercising the fundamental principles of vocal production and speech. Three lecture hours a week for one semester.

#### T D 303V. Acting for Voice Performance Majors I.

Fundamental inquiry into the acting process. Three lecture hours a week for one semester. Prerequisite: A major in voice performance in the Butler School of Music.

#### T D 303W. Acting for Voice Performance Majors II.

Techniques for playing and shaping action within scene structures. Three lecture hours a week for one semester. Prerequisite: Theatre and Dance 303V.

#### T D 306. Introduction to Improvisational Drama.

General introduction to improvisational activities with application to the theatre. Three lecture hours a week for one semester.

#### T D 109C. Musical Theatre Performing Ensemble.

Restricted to Department of Theatre and Dance majors. Rehearsing and performing solo and group numbers from musical theatre and other genres in cabaret-style entertainment and musical revues for on- and offcampus events. Three laboratory hours a week for one semester, with additional laboratory hours to be arranged. Theatre and Dance 109C and 113P, 213P, 313P may not both be counted. May be repeated for credit. Prerequisite: Consent of Instructor.

#### T D 109D. Studio Voice I.

Restricted to Department of Theatre and Dance majors. Establishes foundational vocal technique for musical theatre singing. Develops successful vocal practice strategies and effective, healthy technique through the study of a comprehensive range of musical theatre styles including musical comedy, Golden Age musical drama, and concept and rock musicals. One laboratory hour a week for one semester, with additional laboratory hours to be arranged. May be repeated for credit. Prerequisite: Consent of Instructor.

#### T D 109E. Studio Voice II.

Restricted to Department of Theatre and Dance majors. Continuation of Theatre and Dance 109D. Focus on vocal range, flexibility, and endurance. Text analysis through the study of music and lyrics, using these components as the basis of character development. One laboratory hour a week for one semester, with additional laboratory hours to be arranged. May be repeated for credit. Prerequisite: Two semesters of Theatre and Dance 109D and consent of instructor.

#### T D 311. Languages of the Stage.

Introduction to the ways that performance communicates meaning, as a foundation for further study in theatre and dance. Three lecture hours a week for one semester. Prerequisite: A major in the Department of Theatre and Dance or consent of instructor.

#### T D 311C. Performance as Public Practice.

Restricted to students with a major in the Department of Theatre and Dance. Examines current and historical performance policy in order to understand how the entertainment industry operates nationally. Three lecture hours and one laboratory hour a week for one semester. Theatre and Dance 311 and 311C may not both be counted.

#### T D 311D. Performance as a Collaborative Practice.

Restricted to students with a major in the Department of Theatre and Dance. Explores and defines the creative process of performance collaboration. Three lecture hours and one laboratory hour a week for one semester. Theatre and Dance 311 and 311D may not both be counted.

# T D 111T, 211T, 311T. Introductory Topics in Theatre and Dance.

Introductory topics in theatre and dance, including basic research methods, contemporary and local performance, the role of the artist in society, the philosophy of a fine arts education, and the exploration of campus resources. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May be repeated for credit when the topics vary.

# T D 112, 212. Freshman Movement and Physical Conditioning.

Restricted to Department of Theatre and Dance majors. Principles and techniques of physical conditioning. For each semester of credit hour earned, the equivalent one and one-half laboratory hours a week for one semester. May be repeated for credit. Prerequisite: Consent of the dance faculty.

# T D 312C (TCCN: DANC 1345, DANC 1346). Contemporary Dance Technique.

Intensive study of principles, technique, and vocabulary of contemporary dance. Six laboratory hours a week for one semester. May be repeated for credit. Prerequisite: A major in the Department of Theatre and Dance and consent of the dance faculty.

# T D 312D (TCCN: DANC 2345, DANC 2346). Intermediate Contemporary Dance Technique.

Intensive study of intermediate-level theory, technique, and vocabulary of contemporary dance. Six laboratory hours a week for one semester. May be repeated for credit. Prerequisite: A major in the Department of Theatre and Dance and consent of the dance faculty.

#### T D 312F (TCCN: DANC 1341, DANC 1342). Ballet Technique.

Intensive study of principles, technique, and vocabulary of ballet. Six laboratory hours a week for one semester. May be repeated for credit. Prerequisite: A major in the Department of Theatre and Dance and consent of the dance faculty.

# T D 312G (TCCN: DANC 2341, DANC 2342). Intermediate Ballet Technique.

Study of intermediate-level theory, technique, and vocabulary of ballet as a supporting style. Six laboratory hours a week for one semester. May be repeated for credit. Prerequisite: A major in the Department of Theatre and Dance and consent of the dance faculty.

#### T D 312M. Movement Improvisation.

Exploration and study of elements of movement design. Three hours a week for one semester, with additional laboratory hours as required. May be repeated for credit. Prerequisite: A major in the Department of Theatre and Dance.

#### T D 312N. Movement Composition.

Continuation of Theatre and Dance 312M. Three hours a week for one semester, with additional laboratory hours as required. Prerequisite: Theatre and Dance 312M or consent of instructor.

# T D 112P, 212P, 312P. Fundamental Projects in Dance Performance and Repertory.

Preparation and performance laboratory related to production. At least six laboratory hours a week for one semester; additional laboratory hours may be required for rehearsals and performances. May be repeated for credit. Prerequisite: A major in the Department of Theatre and Dance and consent of the dance faculty.

#### T D 112T, 212T, 312T. Topics in Dance Technique.

Restricted to majors in the Department of Theatre and Dance. For each semester hour of credit earned, at least one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Consent of the dance faculty.

Topic 1: Somatic Practice.

#### T D 313C (TCCN: DRAM 1351). Acting I.

Restricted to Department of Theatre and Dance majors. Approaches to incorporating Stanislavski-based principles in acting, including dramatic action, given circumstances, subtext, sense memory, the magic if, and tempo/rhythm. Three lecture hours a week for one semester, with additional hours to be arranged.

#### T D 313D (TCCN: DRAM 1352). Acting II.

Restricted to Department of Theatre and Dance majors. Continuation of Acting I. Application of Stanislavksi-based principles to scene work selected from realistic genres. Three lecture hours a week for one semester, with additional hours to be arranged. Prerequisite: Theatre and Dance 313C.

#### T D 313E (TCCN: DRAM 2351). Acting III.

Restricted to Department of Theatre and Dance majors. Continuation of Acting II, with greater emphasis on personalization of character needs, given circumstances, actor-to-actor communication, and emotional life. Three lecture hours a week for one semester, with additional hours to be arranged. Theatre and Dance 313E and 324E may not both be counted. Prerequisite: Theatre and Dance 313D.

#### T D 313F. Voice and Movement I.

Understanding the relationship between voice and body in acting, with a focus on freeing tension, releasing vocal power, and enabling physical expression. Three laboratory hours a week for one semester, with additional hours to be arranged. Prerequisite: A major in acting or consent of instructor.

#### T D 313G. Voice and Movement II.

Continuation of Voice and Movement I. Deeper understanding of the vocal-physical connection as a means of playing dramatic action. Three laboratory hours a week for one semester, with additional hours to be arranged. Prerequisite: Theatre and Dance 313F.

#### T D 313K. Voice Laboratory I.

Advanced voice and speech work in breath, support, placement, focus, range, resonance, articulation and endurance. Emphasis placed on personalization of language and text from selected plays. Three laboratory hours a week for one semester, with additional hours to be arranged. Prerequisite: Theatre and Dance 313G or consent of instructor.

#### T D 313L. Voice Laboratory II.

Continuation of Voice Laboratory I. Advanced voice and speech work connected to personalization and truth in classical and heightened text. Three laboratory hours a week for one semester, with additional hours to be arranged. Prerequisite: Theatre and Dance 313K.

#### T D 313M. Movement Laboratory I.

Using the body as an instrument for playing action and bringing the actor to a deeper understanding of physical stage presence. Three laboratory hours a week for one semester, with additional hours to be arranged. Prerequisite: Theatre and Dance 313G or consent of instructor.

#### T D 313N. Movement Laboratory II.

Continuation of Movement Laboratory I. The practice of physical theatre disciplines as a means of deepening the actor's understanding of character and behavior. Three laboratory hours a week for one semester, with additional hours to be arranged. Prerequisite: Theatre and Dance 313M.

#### T D 113P, 213P, 313P. Projects in Acting and Directing.

Preparation and performance laboratory related to production. For each semester hour of credit earned, at least one hour a week for one semester and additional laboratory hours as required. May be repeated for credit. Prerequisite: Consent of the acting/directing faculty.

#### T D 314C (TCCN: DRAM 1330). Design for Performance.

Introduction to the techniques, practices, and processes in costume, lighting, scenic, and sound design. Three lecture hours a week for one semester, with laboratory hours as required. Prerequisite: A major in the Department of Theatre and Dance.

#### T D 314M (TCCN: DRAM 2331). Technical Theatre.

Restricted to majors in the Department of Theatre and Dance. Introduction to the technical aspects of theatrical performance–in costumes, lighting, scenery, and media. Three lecture hours a week for one semester.

#### T D 314P (TCCN: DRAM 1320). Production Laboratory.

Restricted to College of Fine Arts majors. Three hours a week for one semester and additional laboratory hours as required. May be repeated for credit. Prerequisite: A major in the Department of Theatre and Dance; and Theatre and Dance 314M, except for dance majors in the BFA degree program.

#### T D 314Q. Production Shop.

Restricted to theatre studies majors. Assist in the creation of props, lighting, costumes, projection, audio, or scenery for department productions. Nine laboratory hours a week for one semester, with additional laboratory hours as required. May be repeated for credit. Prerequisite: A major in the Bachelor of Fine Arts in Theatre Studies.

#### T D 315. Playwriting I.

Same as Creative Writing 315D. The study and practice of writing plays. Three lecture hours a week for one semester. Creative Writing 315D and Theater and Dance 315 may not both be counted.

#### T D 315C. Foundations of Narrative Design.

Three lecture hours a week for one semester. May be repeated for credit.

#### T D 316D. Directing I.

Restricted to students with a major in the Department of Theatre and Dance. Study and practice of the fundamentals of stage directing: composition, dramatic action, movement, and textual analysis. Three lecture hours a week for one semester with additional laboratory hours as required. Theatre and Dance 316D and 323C may not both be counted. Prerequisite: Sophomore standing or Theatre and Dance 313C.

# T D 317C (TCCN: DRAM 2361). Theatre History through the Eighteenth Century.

Three lecture hours a week for one semester. Prerequisite: For theatre and dance majors, Theatre and Dance 311 or 311C; for others, none.

# T D 317D (TCCN: DRAM 2362). Theatre History since the Eighteenth Century.

Three lecture hours a week for one semester. Prerequisite: For theatre and dance majors, Theatre and Dance 311 or 311C; for others, none.

#### T D 317M. Dance History I.

An exploration of world dance as an expression of cultural identity and change. Three lecture hours a week for one semester. Prerequisite: Theatre and Dance 311 or 311C.

#### T D 317N. Dance History II.

Continuation of Theatre and Dance 317M. Three lecture hours a week for one semester. Prerequisite: Theatre and Dance 317M.

#### T D 119Q, 219Q, 319Q, 419Q, 519Q, 619Q, 719Q, 819Q, 919Q. Topics in Theatre and Dance.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Theatre and Dance. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### T D 320J. Introduction to Creating New Media.

Introduces student actors to strategies to grow as generative artists and master the basics of a few common media production tools to give their creative voice a broader reach in the world. Three lecture hours a week for one semester, with additional hours to be arranged Only one of the following may be counted: Theatre and Dance 320J, 353T (Topic: Intro to Creating New Media), or 353T (Topic 11). Offered on the letter-grade basis only. Prerequisite: For Bachelor of Fine Arts theatre and dance majors: upper-division standing; for others: consent of instructor

#### T D 121P, 221P, 321P. Festival Project and Production.

Students initiate, develop, and/or participate in an approved departmental major festival project or production under the supervision of a faculty member. For each semester hour of credit earned, at least one lecture hour a week for one semester, with additional laboratory hours to be arranged. May be repeated for credit. Prerequisite: Consent of instructor.

#### T D 322. Dance Pedagogy.

Techniques and materials used in the teaching of dance. Two lecture hours and one and one-half laboratory hours a week for one semester. Prerequisite: Upper-division standing and consent of instructor.

#### T D 322C. Contemporary Dance Technique.

Intensive study of principles, technique, and vocabulary of contemporary dance. Six laboratory hours a week for one semester. May not be counted toward the Bachelor of Fine Arts degree with a major in dance. May be repeated for credit. Prerequisite: A major in the Department of Theatre and Dance and consent of the dance faculty.

#### T D 322D. Intermediate Contemporary Dance Technique.

Intensive study of intermediate-level theory, technique, and vocabulary of contemporary dance. Six laboratory hours a week for one semester. May not be counted toward the Bachelor of Fine Arts degree with a major in dance. May be repeated for credit. Prerequisite: A major in the Department of Theatre and Dance and consent of the dance faculty.

#### T D 322E. Advanced Contemporary Dance Technique.

Intensive study of advanced theory, technique, and style of contemporary dance. Six laboratory hours a week for one semester. May be repeated for credit. Prerequisite: A major in the Department of Theatre and Dance and consent of the dance faculty.

#### T D 322F. Ballet Technique.

Intensive study of principles, technique, and vocabulary of ballet. Six laboratory hours a week for one semester. May not be counted toward the Bachelor of Fine Arts degree with a major in dance. May be repeated for credit. Prerequisite: A major in the Department of Theatre and Dance and consent of the dance faculty.

#### T D 322G. Intermediate Ballet Technique.

Study of intermediate-level theory, technique, and vocabulary of ballet as a supporting style. Six laboratory hours a week for one semester. May not be counted toward the Bachelor of Fine Arts degree with a major in dance. May be repeated for credit. Prerequisite: A major in the Department of Theatre and Dance and consent of the dance faculty.

#### T D 322J. Advanced Ballet Technique.

Study of advanced theory, technique, and vocabulary of ballet as a supporting style. Six laboratory hours a week for one semester. May be repeated for credit. Prerequisite: A major in the Department of Theatre and Dance and consent of the dance faculty.

# T D 122P, 222P, 322P. Projects in Dance Performance and Repertory.

Preparation and performance laboratory related to production. At least six laboratory hours a week for one semester; additional laboratory hours may be required for rehearsals and performances. May be repeated for credit. Prerequisite: A major in the Department of Theatre and Dance and consent of the dance faculty.

#### T D 323C. Directing I.

Study and practice of the fundamentals of stage directing: composition, picturization, movement, gesture, and unit structure. Three lecture hours a week for one semester, with laboratory hours as required. Theatre and Dance 316D and 323C may not both be counted. Prerequisite: Upperdivision standing and a major in the Department of Theatre and Dance.

#### T D 323D. Directing II.

Dramatic and environmental analysis of full-length plays. Three lecture hours a week for one semester, with laboratory hours as required. Prerequisite: Theatre and Dance 316D or 323C.

#### T D 323E. Directing III.

Theory and techniques of play directing, with practical applications in projects and scenes. Three lecture hours a week for one semester, with laboratory hours as required. Prerequisite: Upper-division standing, Theatre and Dance 323D, and consent of instructor.

#### T D 323F. Acting Shakespeare.

Restricted to bachelor of fine arts in acting majors. Incorporating language as action by applying basic acting principles to the demand of Shakespearean text. Three laboratory hours a week for one semester, with additional hours to be arranged. Only one of the following may be counted: Theatre and Dance 323F, 353T (Topic: Acting Shakespeare), or 353T (Topic 1). Prerequisite: Theatre and Dance 313E or consent of instructor.

#### T D 323G. Acting in Period Plays.

Exploration of classical and idiosyncratic texts to enable personal and artistic growth in actors. Three laboratory hours a week for one semester, with additional hours to be arranged. Prerequisite: Upperdivision standing, and Theatre and Dance 323F or consent of instructor.

# T D 123P, 223P, 323P. Advanced Projects in Acting and Directing.

For each semester hour of credit earned, at least one hour a week for one semester and additional laboratory hours as required. May be repeated

for credit. Prerequisite: Upper-division standing and consent of the acting/directing faculty.

#### T D 324. Design and Technology for Performance.

Exploration of aspects of design and technology in performance, including costume, lighting, scenery, and sound. Three lecture hours a week for one semester, with laboratory hours as required. May be repeated for credit. Prerequisite: Theatre and Dance 314C, 314M, and consent of instructor.

#### T D 324E. Acting III.

Restricted to theatre and dance majors. Continuation of Acting II, with greater emphasis on personalization of character needs, given circumstances, actor-to-actor communication, and emotional life. Three lecture hours a week for one semester, with additional hours to be arranged. Theatre and Dance 313E and 324E may not both be counted. Offered on the letter-grade basis only. Prerequisite: Upper-division standing, and Theatre and Dance 313D.

#### T D 124P, 224P, 324P. Advanced Production Laboratory.

For each semester hour of credit earned, one lecture hour a week for one semester, with additional laboratory hours to be arranged. May be repeated for credit. Prerequisite: Theatre and Dance 314P; and a major in the Department of Theatre and Dance or consent of instructor.

#### T D 325. Playwriting II.

Same as Creative Writing 340D. Emphasis on the form and writing of the full-length play or equivalent. Three lecture hours a week for one semester. Creative Writing 340D and Theatre and Dance 325 may not both be counted. Prerequisite: Upper-division standing, Creative Writing 315D or Theatre and Dance 315, and consent of instructor.

#### T D 125P, 225P, 325P. Projects in Playwriting.

For each semester hour of credit earned, at least one hour a week for one semester and additional laboratory hours as required. May be repeated for credit. Prerequisite: Upper-division standing and consent of instructor.

#### T D 326. Dramatic Activities for the Classroom.

Theory, materials, and practice, including story dramatization, storytelling, puppets, pantomime, shadow plays, role-playing, and theatre games. Three lecture hours a week for one semester, with laboratory hours as required. Prerequisite: Upper-division standing.

#### T D 326C. Theatre Studies: Creative Drama.

Theory and practice of creative drama for children, both as an art form and as a process for emphasizing creative expression and aesthetic growth. Three lecture hours a week for one semester, with laboratory hours as required. Prerequisite: Upper-division standing and consent of instructor.

#### T D 326D. Theatre Studies: Theatre for Young Audiences.

Theory and practice of all phases of play production for young audiences. Three lecture hours a week for one semester, with laboratory hours as required. Prerequisite: Upper-division standing.

# T D 326E, 626E. Theatre Studies: Directing the Young Performer.

Introduction to the theory and practice of directing and producing theatre with young performers, with emphasis on appropriate literature. Three lecture hours a week for one semester, with additional laboratory hours as required; this course includes field-based instruction in area high schools. Prerequisite: Upper-division standing, Theatre and Dance 323D, and consent of instructor.

#### T D 326F. Creative Drama II.

Advanced investigation of drama and drama-based instructional strategies. Observation, teaching and/or co-teaching in one or more practical contexts during the semester as a way to hone skills needed to successfully plan, implement, and evaluate drama-based lessons. Three lecture hours a week for one semester. Only one of the following may be counted: Theatre and Dance 326F, 351T (Topic: Creative Drama II), 151T (Topic 1), 251T (Topic 1), 351T (Topic 1). Offered on the letter-grade basis only. Prerequisite: Upper-division standing, Theatre and Dance 326C, and consent of instructor

#### T D 126P, 226P, 326P. Projects in Theatre Studies.

For each semester hour of credit earned, at least one hour a week for one semester and additional laboratory hours as required. May be repeated for credit. Prerequisite: Upper-division standing and consent of instructor.

#### T D 326Q. Directing Project in Theatre Studies.

Producing and directing a play in an elementary or secondary school. The equivalent of three hours a week for one semester, with additional laboratory hours as required. Prerequisite: Upper-division standing and Theatre and Dance 326E, 626E.

# T D 127P, 227P, 327P. Projects in History, Criticism, and Performance Studies.

For each semester hour of credit earned, at least one hour a week for one semester and additional laboratory hours as required. May be repeated for credit. Prerequisite: Upper-division standing and consent of instructor.

#### T D 329C. Musical Theatre Performance Workshop.

Restricted to Department of Theatre and Dance majors. Private coaching, master classes, and small and large group rehearsals, culminating in staged public performances of musical revues and/or chamber musicals. Three laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Upper-division standing and consent of instructor.

#### T D 129D. Studio Voice III.

Restricted to Department of Theatre and Dance majors. Continuation of Theatre and Dance 109E. Emphasizes the synthesis of singing and acting skills. One laboratory hour a week for one semester, with additional laboratory hours to be arranged. May be repeated for credit. Prerequisite: Upper-division standing, two semesters of Theatre and Dance 109E, and consent of instructor.

#### T D 129E. Studio Voice IV.

Restricted to Department of Theatre and Dance majors. Continuation of Theatre and Dance 129D. Refines, expands, and strengthens the specialized performance skills required of a musical theatre performer, including studio recording techniques. One laboratory hour a week for one semester, with additional laboratory hours to be arranged. May be repeated for credit. Prerequisite: Upper-division standing and two semesters of Theatre and Dance 109D.

#### T D 129Q, 229Q, 329Q, 429Q, 529Q, 629Q, 729Q, 829Q, 929Q. Topics in Theatre and Dance.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Theatre and Dance. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### T D 332M. Choreography.

Advanced study of the principles and practices of choreography. Three hours a week for one semester, with additional laboratory hours as required. May be repeated for credit. Prerequisite: Upper-division standing, Theatre and Dance 312N, and consent of instructor.

# T D 332N. Choreography: Design for Dance and Movement Theatre.

Continuation of Theatre and Dance 332M. Three hours a week for one semester, with additional laboratory hours as required. May be repeated for credit. Prerequisite: Theatre and Dance 332M.

# T D 232P, 332P. Advanced Projects in Dance Performance and Repertory I.

For 232P, at least six laboratory hours a week for one semester, with additional hours as required; for 332P, at least seven laboratory hours a week for one semester, with additional hours as required. May be repeated for credit. Prerequisite: Upper-division standing, Theatre and Dance 222P, a major in the Department of Theatre and Dance, and consent of the dance faculty.

# T D 232Q, 332Q. Advanced Projects in Dance Performance and Repertory II.

For 232Q, at least six laboratory hours a week for one semester, with additional laboratory hours as required; for 332Q, at least seven laboratory hours a week for one semester, with additional hours as required. May be repeated for credit. Prerequisite: Upper-division standing, Theatre and Dance 232P or 332P, a major in the Department of Theatre and Dance, and consent of the dance faculty.

#### T D 332R. Dance Pedagogy.

Principles, techniques, and materials used in the teaching of dance. Three lecture hours a week for one semester; with additional laboratory hours to be arranged. May be repeated for credit. Prerequisite: Upperdivision standing, a major in the Department of Theatre and Dance, and consent of the dance faculty instructor.

#### T D 332S. Dance Pedagogy Practicum.

Practical application techniques and materials used in the teaching of dance. Three laboratory hours a week for one semester, with additional laboratory hours to be arranged. May be repeated for credit. Prerequisite: Upper-division standing, Theatre and Dance 332R, a major in the Department of Theatre and Dance, and consent of the dance faculty.

#### T D 350J. Topics in Performance Lab.

Subjects in acting including voice/speech, movement, character, composition and collaboration with directors. Three lecture hours a week for one semester, with additional lab hours to be arranged as needed. May be repeated for credit when the topics vary.

- Topic 1: Spectacle. Topic 2: Classics. Topic 3: Contemporary Plays.
- Topic 4: Composition.

**Topic 5: Actors.** Offers students experience and training in performance techniques and methods for working collaboratively with directors in rehearsal.

**Topic 6: Language.** Offers students experience and training in performance techniques and methods for working collaboratively with directors in rehearsal.

# T D 351F. Teaching Artists in Schools and Community Settings.

Explores how to use the arts to educate in arts and non-arts settings (professional arts organizations, after-school programs, schools,

museums, and community sites). Engagement with a variety of local arts organizations that hire and train teaching artists including dancers, visual artists, and theatre professionals through service learning projects. Includes outside service learning projects with local community organizations or schools. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upper-division standing and consent of instructor.

#### T D 351S. Seminar in Theatre and Dance.

Three lecture hours a week for one semester. Prerequisite: Completion of at least ninety semester hours of coursework, a major in the Department of Theatre and Dance, and consent of instructor.

#### T D 151T, 251T, 351T. Topics in Theatre and Dance.

For each semester hour of credit earned, the equivalent of one class hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and consent of instructor.

**Topic 2: Digital Storytelling with Youth and Communities.** Explores digital storytelling and applied theatre as tools for reflecting on self, building community, and fostering cultural engagement. Engagement in creative writing and devising through drama and digital technologies; collaborative development and documentation of digital stories and performance collages. Extra lab hours may be required for digital documenting and editing. Theater and Dance 351T (Topic: Digital Storytelling) and 151T, 251T, 351T (Topic 2) may not both be counted.

**Topic 3: Drama and Theatre in Museums.** Explores the history and multiple contexts of drama/theatre applications in museum settings in the U.S. and international sites.

**Topic 4: Immersive Theatre Lab Practice and Production.** Theater and Dance 351T (Topic: IMMERSVE THEATRE LAB PRAC/PROD) and 151T, 251T, 351T (Topic 4) may not both be counted.

**Topic 5: Devised Theatre Lab.** Theater and Dance 351T (Topic: DEVISED THEATRE LAB) and 151T, 251T, 351T (Topic 5) may not both be counted.

#### T D 352. Experiential Anatomy.

Restricted to Department of Theatre and Dance majors. Principles and techniques of physical conditioning with practical applications to injury prevention for dance and theatre practitioners. Three laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Upper-division standing, Theatre and Dance 232P (or 332P), and consent of the dance faculty.

#### T D 152P, 252P, 352P. Projects in Dance Movement Studies.

For each semester hour of credit earned, at least one hour a week for one semester and additional laboratory hours as required. May be repeated for credit. Prerequisite: Upper-division standing and consent of instructor.

#### T D 152T, 252T, 352T. Topics in Dance and Movement.

Fundamental study of principles and vocabulary of dance. For each semester hour of credit earned, at least one hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and consent of instructor.

Topic 1: Musical Theatre Dance I. Explores original repertoire from a wide variety of musical theatre styles. For each semester hour of credit earned, one lecture hour a week for one semester, with additional hours to be arranged. Theatre and Dance 152T, 252T, 352T (Topic: Dance for Musical Theatre) and 152T, 252T, 352T (Topic 1) may not both be counted. Prerequisite: Upper-division standing. **Topic 2: Musical Theatre Dance II.** Explores original musical theatre choreography from a variety of styles. Repertoire will require a higher level of skills. For each semester hour of credit earned, one lecture hour a week for one semester, with additional hours to be arranged. Theatre and Dance 152T, 252T, 352T (Topic: Dance for Musical Theatre II) and 152T, 252T, 352T (Topic 2) may not both be counted. Prerequisite: Upper-division standing, and Theatre and Dance 352T (Topic 1).

**Topic 3: Broadway Jazz I.** Refines and expands dance technique and skills essential to Broadway-style choreography. Original Broadway choreography requiring a high level of technique and character development. For each semester hour of credit earned, one lecture hour a week for one semester, with additional hours to be arranged. Theatre and Dance 152T, 252T, 352T (Topic: Broadway Jazz I) and 152T, 252T, 352T (Topic 3) may not both be counted. Prerequisite: Upper-division standing, and Theatre and Dance 152T, 252T, 352T (Topic 2).

**Topic 4: Broadway Jazz II.** Continues to refine and expand dance technique and skills essential to Broadway style choreography. Original Broadway choreography requiring a high level of technique and character development. For each semester hour of credit earned, one lecture hour a week for one semester, with additional hours to be arranged. Theatre and Dance 152T, 252T, 352T (Topic: Broadway Jazz II) and 152T, 252T, 352T (Topic 4) may not both be counted. Prerequisite: Upper-division standing, and Theatre and Dance 352T (Topic 3).

**Topic 5: Pointe.** A study and practice of classical and contemporary ballet pointe technique. Distinguishes between and practice various 'schools' of pointe technique, study its anatomical principles, and learn repertoire ranging from the nineteenth century to the current day. Increasingly complex combinations of movements, positions, and rhythms will be applied toward developing physical skills, cognitive skills, and performance quality. Individual expression and artistry is encouraged. Theatre and Dance 152T (Topic: Pointe) and 152T, 252T, 352T (Topic 5) may not both be counted.

#### Topic 6: Tap.

**Topic 7: Advanced Pilates: Evolved Lab.** Utilizes Pilates-evolved techniques, equipment, and readings to investigate a daily mind/ body practice of efficient alignment, core strengthening, movement re-education and execution to enhance movement expressivity in performance. Theatre and Dance 352T (Topic: ADVANCED PILATES: EVOLVED LAB) and 152T, 252T, 352T (Topic 7) may not both be counted.

**Topic 8: Gyrokinesis.** Theatre and Dance 302T (Topic: INTRO TO GYROKINESIS) and 152T, 252T, 352T (Topic 8) may not both be counted.

**Topic 9: Beginning Hip-Hop.** Introduction to the foundation of street dance styles, specifically old school Hip Hop. Exploration of the teachings of Philadelphia-born street dance pioneer, Rennie Harris, and his codification terminology and stylized movement vocabulary. Study of these dances and understand their cultural origins through an exploration of movement principles, history, and philosophy of street dance. Foundational House dance technique may also be introduced.

**Topic 10: Intermediate/Advanced Hip-Hop.** Continued introduction to the foundation of street dance styles, specifically old school Hip Hop and House dance techniques. Exploration of these dance styles and their cultural origins through an investigation of movement principles, history, and philosophy of street dance. Theater and Dance 302T (Topic: HIP-HOP) and 152T (Topic 10) may not both be counted. **Topic 11: Hip-Hop History.** Introduction to Hip-Hop dance as a culturally significant form. Explores history, the social and political forces at work, and the fundamental techniques (Campbell Locking, Popping, Breaking etiquette/movements, Hip-Hop Party Dance and House). Intellectual challenge is offered through the lens of critical race theory and historical context. Addresses the origin and evolution of American Hip-Hop dance rooted in a theoretical structure that springs from the elemental nature of the African Diaspora. Emphasis on the social, political, and economic environment in which it was fashioned. Theater and Dance 352T (Topic: HIP HOP HISTORY) and 152T (Topic 11) may not both be counted.

**Topic 12: Kinetic Storytelling.** Making use of tools found in Africanist performance traditions to explore issues and experiment with ways to craft a movement-based performance that expresses a specific point of view and draws out questions about our chosen issue or effort. Theater and Dance 352T (Topic: KINETIC STORYTELLING) and 152T (Topic 12) may not both be counted.

**Topic 13: Advanced Tap.** Only one of the following may be counted: Theatre and Dance 302T (Topic: Advanced Tap), 352T (Topic: Advanced Tap), or 152T, 252T, 352T (Topic 13).

**Topic 14: Theory and Practice Pilates-Evolved Lab.** Explore daily mind/body practice of efficient alignment, core strengthening, movement re-education and execution using Pilates-evolved techniques, equipment, and readings to enhance movement expressivity in performance. Theatre and Dance 352T (Topic: THRY/ PRAC PILATES-EVOLVED LAB) and 152T (Topic 14) may not both be counted.

**Topic 15: Yoga.** Only one of the following may be counted: Theatre and Dance 102T (Topic: YOGA FOR DANCE), 352T (Topic: YOGA FOR DANCERS), or 152T, 252T, 352T (Topic 15).

#### T D 353C. Devised Work.

A survey of contemporary devising techniques. Work explores present-day parallels for making performance for both individual and collaborative practices. The equivalent of three lecture hours, with additional hours to be arranged. Prerequisite: Upper-division standing

#### T D 353D. Acting and the Camera I.

Fundamentals of acting for the camera; adjusting from the stage to the demands of the camera. Six laboratory hours a week for one semester. Theatre and Dance 351T (Topic: Acting for the Camera) and 353D may not both be counted. Prerequisite: For Bachelor of Fine Arts in Acting majors, upper-division standing and Theatre and Dance 353C; for others, upper-division standing, and Theatre and Dance 313E with a grade of at least B- or consent of instructor.

#### T D 353E. Acting and the Camera II.

Advanced technique for the camera. Professional audition protocols and career preparation. Six laboratory hours a week for one semester. Theatre and Dance 351T (Topic: Acting for the Camera II) and 353E may not both be counted. Prerequisite: Upper-division standing and Theatre and Dance 353D.

#### T D 353K. Voice-Over and Narration.

Microphone technique and the use of the voice to create character in various media applications such as narration, video games, and commercial copy. Three laboratory hours a week for one semester, with additional hours to be arranged. Prerequisite: Upper-division standing; and Theatre and Dance 313L and 323F, or consent of instructor.

#### T D 353Q. Portfolio Preparation.

Restricted to Bachelor of Fine Arts in Acting majors. Selection and rehearsal of materials in preparation for professional acting interviews and auditions. Three laboratory hours a week for one semester, with additional hours to be arranged. Prerequisite: Upper-division standing.

#### T D 353R. Business of Acting.

Restricted to majors in the Department of Theatre and Dance. Survey of marketing oneself as an actor, the actor's relationship to agents and casting directors, and methods for initiating and maintaining a professional acting career. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### T D 353T. Topics in Acting and Directing.

Restricted to majors in the Department of Theatre and Dance. Topics in acting including voice/speech, movement, and directing. Three lecture hours a week for one semester, with additional hours to be arranged. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing, and Theatre and Dance 313E with a grade of at least B - or consent of the acting/directing faculty.

**Topic 1: Acting Shakespeare.** Incorporating language as action by applying basic acting principles to the demand of Shakespearean text. Only one of the following may be counted: Theatre and Dance 323F, 353T (Topic: Acting Shakespeare), or 353T (Topic 1).

**Topic 2: Comedy Acting.** Focus on issues of acting in comedy. Address the problems that confront the actor when rehearsing and performing in extant comedy play scripts. Uses improvisational, non-theatrical, and original material for developing comedy skills. Participation as an actor is mandatory. Only one of the following may be counted: Theatre and Dance 351T (Topic: Comedy Acting), 353T (Topic: Comedy Acting), or 353T (Topic 2).

**Topic 3: Dialects for the Stage.** Emphasizes dialect skills and good vocal production for actors pursuing professional work. Emphasis is placed on independent dialect study projects. Theatre and Dance 353T (Topic: Dialects for the Stage) and 353T (Topic 3) may not both be counted.

**Topic 5: Stage Combat for the Actor.** Introduction to theatrical fighting and violence. Explores the techniques used to create the illusion of stage fighting and violence both with and without weapons. Focus on the practical application of violence to tell stories on the stage and/ or screen. An opportunity to have work observed in front of a Fight Master of the Society of American Fight Directors. Theatre and Dance 353T (Topic: Stage Combat for the Actor) and 353T (Topic 5) may not both be counted.

**Topic 6: Audition Techniques.** Developing skills for bringing your personal self to acting and to the audition. Theatre and Dance 353T (Topic: Audition Techniques) and 353T (Topic 6) may not both be counted.

**Topic 11: Introduction to Creating New Media For Actors.** Introduces student actors to strategies to grow as generative artists and master the basics of a few common media production tools to give their creative voice a broader reach in the world. Only one of the following may be counted: Theatre and Dance 320J, 353T (Topic: Intro to Creating New Media), or 353T (Topic 11).

#### T D 154P, 254P, 354P. Projects in Design and Technology.

Individual projects in theatre design and technology. For each semester hour of credit earned, at least one hour a week for one semester and additional laboratory hours as required. May be repeated for credit. Prerequisite: Consent of instructor.

#### T D 354T. Topics in Design and Technology.

Three lecture hours a week for one semester, with laboratory hours as required. May be repeated for credit when the topics vary. Prerequisite: Consent of instructor.

Topic 2: Fabric Painting and Dyeing. Fundamentals of textile surface design.

**Topic 3: Mask Making.** Fundamentals of mask theory, design, and construction for theatre and live performance.

**Topic 4: Millinery.** Fundamentals of hat design, fitting, and construction techniques. Theatre and Dance 354T (Topic: Millinery) and 354T (Topic 4) may not both be counted.

#### Topic 5: Scenery Technology I.

**Topic 6: Costume Rendering.** Fundamentals of costume research and drawing.

Topic 7: Drawing for Theatre Designers.

#### Topic 8: Painting.

Topic 9: Automated Lighting I. Fundamentals of automated and computer-aided lighting for theatre and live performance. Topic 10: Costume Design Skills. Fundamentals of research, drawing, rendering, and script/character analysis and critique for costume design. Theatre and Dance T D 354T (Topic: Design Skills: Costume) and 354T (Topic 10) may not both be counted.

Topic 11: Lighting Design Skills. Fundamentals of research, paperwork communication, and technology for lighting designers. Topic 12: Scenery Design Skills. Fundamentals of designing, drafting, and model building of scenery for theatrical and film designers. Topic 13: Stage Makeup. Tools and products used by professional makeup artists. Includes techniques for natural, character, and special effects makeup in theatre, opera, dance, film, and TV.

**Topic 14: Figure and Fabric Rendering.** Principles of figure and fabric painting from life.

**Topic 15: Scene Painting.** Scene painting techniques for theatrical designers.

**Topic 16: Automated Lighting II.** Advanced automated and computeraided lighting theory and techniques.

**Topic 17: Game Development Capstone: Two-Dimensional Games.** Same as Computer Science 354S and Music 354S. Participation in an interdisciplinary team to gain a thorough understanding of the two-dimensional game development process, through modeling of the environment and practices that are used in game studios. Three lecture hours a week for one semester. Only one of the following may be counted: Computer Science 354S, 378 (Topic: Game Development Capstone: 2D Games), Music 354S, 376J (Topic: Game Development Capstone: 2D Games), Theatre and Dance 354T (Topic 17). Additional prerequisite: For computer science majors, Computer Science 429 or 429H with a grade of at least C- and consent of instructor; for others, consent of instructor.

**Topic 18: Game Development Capstone: Three-Dimensional Games.** Same as Computer Science 354T and Music 354T. Participation in interdisciplinary teams to gain a thorough understanding of the threedimensional game development process, through modeling of the environment and practices that are used in game studios. Three lecture hours a week for one semester. Only one of the following may be counted: Computer Science 354T, Music 354T, 376J (Topic: Game Development Capstone: 3D Games), Theatre and Dance 354T (Topic 18). Additional prerequisite: For computer science majors, Computer Science 429 or 429H with a grade of at least C- and consent of instructor; for others, consent of instructor.

**Topic 19: Sound Design I.** Introduction to sound design for live performance. Theatre and Dance 354T (Topic: Sound Design I) and 354T (Topic 19) may not both be counted.

**Topic 20: Sound Design II.** Advanced instruction in sound design for live performance. Theatre and Dance 354T (Topic: Sound Design II) and 354T (Topic 20) may not both be counted. Additional prerequisite: Theatre and Dance 354T (Topic 19).

**Topic 21: Classical Tutu Design and Construction.** Fundamentals of classical tutu construction, including draping, pattern making, fitting techniques on a live model.

**Topic 22: Puppet Design and Construction.** Theory and technique of puppet creation and performance. May include marionettes, hand and rod, and body puppets.

**Topic 23: Armour and Fabrication.** Exploring the uses of leather as a medium for armour making. Shaping, tooling, coloring application for uses in theatre and film. Theatre and Dance 354T (Topic: Armour Design and Fabrication) and 354T (Topic 23) may not both be counted.

**Topic 24: Design Skills: Scenic Renderings.** Fundamentals of drawing and color for renderings of scenery for theatre and film. Theatre and Dance 354T (Topic: Scenic Rendering) and 354T (Topic 24) may not both be counted. **Topic 25: Portfolio for Designers.** Fundamentals of self-marketing for theatre artists. Theatre and Dance 354T (Topic: Portfolio for Designers) and 354T (Topic 25) may not both be counted.

**Topic 26: Media Creation for Live Performance.** Introduction to the particulars of producing and integrating media into live performance environments. Theatre and Dance 354T (Topic: Media Creation for Live Perf) and 354T (Topic 26) may not both be counted.

**Topic 27: Festival and Event Management.** Fundamentals of the stage management process for large public events. Theatre and Dance 354T (Topic: Festival/Event Management) and 354T (Topic 27) may not both be counted.

**Topic 28: Tailoring I.** Fundamental theory and techniques in tailoring for the live performer. Theatre and Dance 354T (Topic: Tailoring I) and 354T (Topic 28) may not both be counted.

**Topic 29: Tailoring II.** Advanced theory and techniques in tailoring for the live performer. Theatre and Dance 354T (Topic: Tailoring II) and 354T (Topic 29) may not both be counted. Additional prerequisite: Theatre and Dance 354T (Topic 28).

**Topic 30: Wig Making and Styling.** Fundamentals of building and styling wigs for use in the theatre. Theatre and Dance 354T (Topic: Wig Making and Styling) and 354T (Topic 30) may not both be counted.

**Topic 31: Scenic Design.** Introduction to the conceptualization and design of scenery for the theatre.

**Topic 32: Stage Craft.** Fundamentals of scenery construction and assembly. Theatre and Dance 354T (Topic: Stage Craft) and 354T (Topic 32) may not both be counted.

**Topic 33: Projection Design.** Introduction to the field of projection design in live performance. Theatre and Dance 354T (Topic: Projection Design) and 354T (Topic 33) may not both be counted.

**Topic 34: Entertainment Systems Design.** Explores interconnectedness between lighting, projection, and media that is commonly found in live entertainment environments.

**Topic 36: Stage Management.** Fundamentals of the stage management process for theatrical production. Theatre and Dance 354T (Topic: Stage Management) and 354T (Topic 36) may not both be counted.

**Topic 37: Advanced Stage Management.** Advanced instruction in stage management for theatrical production. Theatre and Dance 354T (Topic: Advanced Stage Management) and 354T (Topic 37) may not both be counted.

#### T D 355. Playwriting III.

Same as Creative Writing 355D. Focus on experiments in revising dramatic text in order to create a common vocabulary around narrative structure. Revision often includes the creation of multiple new drafts, digging through past drafts for abandoned themes, lost focus, and new inspiration as well as exploring character, narrative, and/or language. Three lecture hours a week for one semester, with laboratory hours as required. Only one of the following may be counted: Creative Writing 355D, Theatre and Dance 355T (Topic: Playwriting III), 355. Prerequisite: Upper-division standing, Creative Writing 340D or Theatre and Dance 325, and consent of instructor.

#### T D 355T. Topics in Playwriting.

Three lecture hours a week for one semester, with laboratory hours as required. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and consent of instructor.

#### T D 356T. Topics in Theatre Studies.

Topics in theatre studies, including creative drama, theatre for children and youth, and theatre with young adults. Three lecture hours a week for one semester, with laboratory hours as required. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

#### Topic 1: Puppetry.

**Topic 2: Latino Theatre for Young Audiences.** Theatre and Dance 356T (Topic: LATINO THTR FOR YOUNG AUDIENCE) and 356T (Topic 2) may not both be counted.

**Topic 3: Creative Drama in the Museum.** The application of creative drama methods in museum settings. Theatre and Dance 356T (Topic: CREATIVE DRAMA IN THE MUSEUM) and 356T (Topic 3) may not both be counted.

#### T D 357D. Dramaturgy.

Restricted to theatre and dance majors. Three lecture hours a week for one semester. Theatre and Dance 351T (Topic: Dramaturgy) and 357D may not both be counted. Offered on the letter-grade basis only. Prerequisite: Sophomore standing.

# T D 357T. Topics in History, Criticism, and Performance Studies.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

Topic 1: Latin American Theatre and Drama. Same as Latin American Studies 322 (Topic 13: Latin American Theatre and Drama). Topic 2: Gender And Sexuality in Performance. Same as Women's and Gender Studies 345 (Topic 56). Only one of the following may be counted: Theater and Dance 357T (Topic: Gender And Sexuality in Performance), 357T (Topic 2), Women's and Gender Studies 345 (Topic: Gender And Sexuality in Performance), 345 (Topic 56). Additional prerequisite: Upper-division standing and consent of instructor.

#### Topic 3: Theatre for Dialogue.

**Topic 4: Confronting LGBTQ Oppression.** Theatre and Dance 357T (Topic: Confronting LGBTQ Oppression) and 357T Topic 4 may not both be counted.

**Topic 10: Gwendolyn Brooks.** A study of the prose and poetry of Gwendolyn Brooks, giving particular attention to her novel, Maud Martha. Analyze texts, develop performance scripts, create criticism, and present readings centered around the work of Gwendolyn Brooks. Emphasis will be placed on Black Feminist staging strategies, the role of Chamber Theatre in the development of black art, and the position of Gwendolyn Brooks in the literary world. Theatre and Dance 357T (Topic: Gwendolyn Brooks) and 357T (Topic 10) may not both be counted.

Topic 12: Reading Cannon.

#### T D 372, 672, 972. Industry Internship.

Restricted to majors in the Department of Theatre and Dance. Professional internship position in business and/or production. For every three semester hours of credit earned, at least ten internship hours a week for one semester. May be repeated for credit. Prerequisite: Upperdivision standing, a University grade point average of at least 2.50, and consent of instructor.

#### T D 375H. Honors Seminar.

Restricted to majors in the Department of Theatre and Dance. Comprehensive introduction to research in the area of theatre and dance. Three lecture hours a week for one semester. Prerequisite: Upper-division standing; admission to the Honors Program in Theatre and Dance; and consent of the head of the Theatre and Dance Honors Program.

#### T D 376H. Reading Tutorial in Theatre and Dance Problems.

Individual projects to be completed under faculty supervision. The equivalent of three lecture hours a week for one semester, with additional laboratory hours as required. May be repeated for credit. Prerequisite: Upper-division standing; Theatre and Dance 375H; admission to the Honors Program in Theatre and Dance; and consent of the head of the Theatre and Dance Honors Program.

#### T D 379H. Thesis Course for Departmental Honors.

The equivalent of three lecture hours a week for one semester, with additional laboratory hours as required. May be taken twice for credit. May be repeated for credit. Prerequisite: Upper-division standing, Theatre and Dance 375H, admission to the Honors Program in Theatre and Dance, and consent of the head of the Theatre and Dance Honors Program.

# **Fine Arts**

### Fine Arts: F A

#### **Lower-Division Courses**

#### F A 103. Introduction to Teaching Fine Arts.

Explores concepts in teaching art, dance, music, or theatre in Texas public schools. One lecture hour a week for one semester. Students enrolled in UTeach Fine Arts may not count this course towards their degree. Offered on the pass/fail basis only. Prerequisite: For non-College of Fine Arts students, consent of department.

#### F A 308. Arts Integrations for Multidisciplinary Connections.

Through readings, videos, in-class activities, discussion, field trips, micro-teaching, and written reflection, designed to develop a practical understanding of the techniques and skills associated with integrating the arts into various contexts. Provides experience in each art content area (dance, music, theatre arts, and visual arts) to develop an introductory understanding of each of these disciplines. Three lecture hours a week for one semester. Offered on the letter-grade basis only.

#### F A 110, 210, 310. Topics in the Fine Arts.

Interdisciplinary studies within the fine arts or including the fine arts and other areas. For each semester hour of credit earned, the equivalent of one class hour a week for one semester. May be repeated for credit when the topics vary.

#### F A 313C. Engaging with the Arts from the Audience.

An introduction to gaining more from engaging with live artistic performance through learning new tools and techniques, meeting artists and attending performances from Texas Performing Arts. Three lecture hours a week for one semester. Offered on the letter-grade basis only.

# F A 119, 219, 319, 419, 519, 619. International Learning Seminars.

Restricted to students participating in a Maymester Abroad course. Discussion of various issues related to the academic, cultural, and personal aspects of completing work in international locations. For each semester hour of credit earned, one lecture hour a week for one semester. Fine Arts 119, 219, 319, 419, 519, 619 and Undergraduate Studies 119 may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

#### F A 119Q, 219Q, 319Q, 419Q, 519Q, 619Q, 719Q, 819Q, 919Q. Topics in Fine Arts.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the College of Fine Arts. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### F A 320. Exploring the Fine Arts.

Restricted to non-College of Fine Arts students. An interdisciplinary introduction to the fine arts: their basic concepts, meaning, aesthetics, and role in society. Three lecture hours a week for one semester, with field trips as required. May not be counted toward a degree in the College of Fine Arts. Prerequisite: Upper-division standing.

# F A 129, 229, 329, 429, 529, 629. International Learning Seminars.

Restricted to students participating in a Maymester Abroad course. Discussion of various issues related to the academic, cultural, and personal aspects of completing work in international locations. For each semester hour of credit earned, one lecture hour a week for one semester. Fine Arts 129, 229, 339, 429, 529, 629 and Undergraduate Studies 119 may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: Upper-division standing.

#### F A 129Q, 229Q, 329Q, 429Q, 529Q, 629Q, 729Q, 829Q, 929Q. Topics in Fine Arts.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the College of Fine Arts. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### F A 140, 240, 340. Fine Arts Internship.

Restricted to students in the College of Fine Arts. Designed to establish the academic foundations of an internship course in the fine arts. Integration of knowledge derived from academic studies compiled with the experiences gained in an internship setting. Requires completion of a minimum of fifty hours of satisfactory on-site work per credit hour earned. A minimum of fifty hours of satisfactory on-site work per credit hour earned. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: Upper-division standing, a University grade point average of at least 2.50, and consent of instructor.

#### F A 150, 250, 350. Special Topics in the Fine Arts.

Special interdisciplinary studies within the fine arts or including the fine arts and other areas. For each semester hour of credit earned, the equivalent of one class hour a week for one semester. May be repeated for credit when the topics vary.

**Topic 1: Managing Performing Arts Organizations.** Restricted to students in the College of Fine Arts; other students may contact the department for permission to register for this class. Focuses on the business aspect of performing arts and, in particular, nonprofit, mission-based arts organizations with an emphasis on organizational structure; budget development and management; strategic planning; trustee development; trustee/staff relations; fundraising; marketing and publicity; audience development, development of outreach programming; box-office management; operations and human resources; and collective bargaining agreements/labor relations, and contract negotiation. Fine Arts 150, 250, 350 (Topic 1) may not both be counted.

#### F A 160, 260, 360. Advanced Topics in the Fine Arts.

Advanced interdisciplinary studies within the fine arts or including the fine arts and other areas. For each semester hour of credit earned, the

equivalent of one class hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

#### F A 362. Foundations of Arts Management.

Overview of issues in the management of contemporary arts organizations in both internal functions and relations with external constituencies. Explores organizational creation, leadership, mission development, funding, audience development, evaluation, community relations, and the policy environment. Three lecture hours a week for one semester. Only one of the following may be counted: Fine Arts 362, 381 (Topic: Foundations of Arts Management), 383. Offered on the lettergrade basis only.

#### F A 363. Arts Entrepreneurship and New Venture Creation.

Introduction to arts entrepreneurship with particular attention to the creation of new ventures. Focus on the process of generating and refining ideas for creating new enterprises, and key components and formulation of a business plan. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upperdivision standing.

#### F A 364. Developing and Reaching Audiences.

Focus on central issues faced by arts and organizations with respect to audience development and engagement. Explores different models and techniques adopted by organizations with respect to audience and community engagement, and fundamentals of marketing for arts organizations. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upper-division standing.

#### F A 365. Fundraising in the Arts.

Survey of strategies involved in generating contributed income for arts organizations from private individuals, foundations, corporations, businesses and government agencies, and focus on how the process is related to marketing tickets to the same patrons. Three lecture hours a week for one semester. Only one of the following may be counted: Fine Arts 365, 381 (Topic: Fundraising in the Arts), 385. Offered on the lettergrade basis only. Prerequisite: Upper-division standing.

#### F A 366. Managing Arts Organizations.

Focuses on the business aspect of managing arts with emphasis on non-profit, mission-based, performing, and visual arts organizations. Explores organizational structure and development, budget development and management, strategic planning, trustee development, trustee/staff relations, fundraising, marketing and publicity, audience development, development of community engagement programming, ticketing and admission management, operations, human resources, collective bargaining/labor relations, and contract negotiation. Three lecture hours a week for one semester. Only one of the following may be counted: Fine Arts 366, 381 (Topic 1: Managing Performing Arts Organizations), 381 (Topic: Managing Performing Arts Organizations), 386. Offered on the letter-grade basis only. Prerequisite: Upper-division standing.

#### F A 367. Philanthropy and Arts Organizations.

Examines sources, characteristics, and consequences of cultural philanthropy in the United States. Explores practical implications of how private philanthropy works for those engaged in seeking and awarding support. Focus on select exercises and cases to translate broad themes to practical issues related to formulating and implementing strategies for seeking resources and supporting arts and culture. Three lecture hours a week for one semester. Only one of the following may be counted: Fine Arts 367, 381 (Topic 2: Philanthropy And The Arts), 381 (Topic: Philanthropy And The Arts), 387. Offered on the letter-grade basis only. Prerequisite: Upper-division standing, or consent of instructor.

#### F A 368. Cultural Policy and Participation.

Examines governmental and private policies, and structures that impact cultural production and participation. Considers rationales for and against public support for culture, how policies have both promoted and impeded cultural producers and consumers, advocacy efforts by organizations in the cultural sector, and relations between governmental policy and private initiative. Three lecture hours a week for one semester. Only one of the following may be counted: Fine Arts 368, 381 (Topic: Cultural Policy and Participation), 388. Offered on the letter-grade basis only. Prerequisite: Upper-division standing.

#### F A 369. The Entrepreneurial Artist.

Same as Arts and Entertainment Technologies 367. Exploration of new modes of online and social arts marketing and self promotion. Use of established models to create materials and prototype marketing resources. Three lecture hours a week for one semester. Only one of the following may be counted: Arts and Entertainment Technologies 367, Fine Arts 360 (Topic: The Entrepreneurial Artist), Fine Arts 369.

#### F A 170, 270, 370. Longhorn Startup Seminar.

Focus on skill development and mentoring in start-up formation, technology development, market validation, marketing, sales, operations, human resources, program management, and finance. Includes discussion of intellectual property, social issues in design, as well as ethical and safety considerations. Emphasis on written and oral presentation of start-up activities. For each semester hour of credit earned, one lecture hour a week for one semester. Only one of the following may be counted: Biomedical Engineering 177T, 277T, 377T (Topic: Longhorn Startup Seminar), Computer Science 178, 378 (Topic: Longhorn Startup Seminar), Engineering Studies 177, 277, 377 (Topic: Longhorn Startup Seminar), 177, 277, 377 (Topic 1), Fine Arts 160, 260, 360 (Topic: Longhorn Startup Seminar), 170, 270, 370. Offered on the letter-grade basis only. Prerequisite: Consent of instructor.

# F A 171, 271, 371. Special Topics in Arts Management and Administration.

Focused and in-depth study of selected topics in the management and administration of artistic ventures in the commercial, not-for-profit, and/ or public sectors. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

Topic 1: Subjects in Arts Management. Focused and in-depth study of selected subjects in the management of artistic ventures in the commercial, not-for-profit, and/or public sectors. Offered on the letter-grade basis only.

**Topic 2: Subjects in Arts Administration.** Focused and in-depth study of selected subjects in the administration of artistic ventures in the commercial, not-for-profit, and/or public sectors. Offered on the letter-grade basis only.

#### F A 175, 375, 675. Independent Studies: Art, Drama, or Music.

Independent study or research within the fine arts or between the fine arts and other disciplines. Individual instruction. May be repeated for credit. Prerequisite: Upper-division standing, a grade point average of at least 3.00, consent of instructor, and consent of the dean of the College of Fine Arts.

# Sarah and Ernest Butler School of Music

The University of Texas at Austin is an institutional member of the National Association of Schools of Music, approved for both its undergraduate and its graduate degrees in music. The requirements for entrance and for graduation given in this catalog are in accordance with the published regulations of the association.

### Areas of Study

The College of Fine Arts offers courses in several areas of music. The undergraduate courses available in music performance, music literature, music studies, and music theory are listed below; complete descriptions of all music courses are after the tables below.

### **Music Performance**

Before the first semester or summer session in which they will be enrolled, new and transfer students must file an Application for Instruction in Music Performance. The card indicates the faculty member to whom the student has been assigned.

All students enrolled in a music performance course must fill out a Music Performance and Jury Report at the end of each semester or summer session for each course taken.

Students who receive a grade below *C*- in any music performance course may not register for that course the next semester until the requests of other students for such work have been met.

Some of the following courses may be repeated for credit on the recommendation of the appropriate music performance jury.

MUS 201J Beginning Class Piano for Nonmusic Majors MUS 201K Second-Semester Class Piano for Nonmusic Majors MUS 201M Beginning Music Performance: Class Piano MUS 201N Beginning Music Performance: Second-Semester Class Piano MUS 201S Beginning Music Performance: Class Harp MUS 201T Beginning Music Performance: Second-Semester Class Harp MUS 210J Beginning Instruction in Music Performance: Third-Semester Class Piano MUS 210K Beginning Instruction in Music Performance: Fourth-Semester Class Piano MUS 111E English Diction and Phonetic Translation MUS 311F French for Musicians MUS 311G German for Musicians MUS 311J Italian for Musicians MUS 115T Lower-Division Reed Making MUS 420J Junior Jazz Recital MUS 420R Junior Recital MUS 222J Instrumental Conducting MUS 222K Instrumental Conducting MUS 223J Choral Conducting MUS 223K Choral Conducting MUS 159J Harp Repertoire MUS 259L Vocal Repertoire Coaching MUS 259N Chamber Music: Strings and Piano MUS 259T Topics in Instrumental Technology MUS 160C Senior Composition Recital MUS 460J Senior Jazz Recital MUS 460R Senior Recital MUS 366P Senior Piano Pedagogy Project MUS 176C, MUS 276C, MUS 376C Special Topics in Music Performance MUS 178C, MUS 278C, MUS 378C Independent Study: Music Performance

### **Music Literature**

MUS 302L An Introduction to Western Music MUS 302P Introductory Topics in Western Music MUS 303M Introduction to Music in World Cultures MUS 303N Introduction to Popular Music in World Cultures MUS 303P Topics in Music of World Cultures MUS 307 Topics in Popular Music MUS 313M History of Music I MUS 313N History of Music II MUS 330L History of Music III MUS 334 The Music of the Americas MUS 337 Music and Film Sound MUS 338 Masterpieces of Music MUS 342 Area Studies in Ethnomusicology MUS 343J History of Jazz MUS 376G Special Topics in Music Literature MUS 178G, MUS 278G, MUS 378G Independent Study: Music Literature MUS 379K Advanced Topics in Music Literature

### **Music Studies**

MUS 115D String Instrument Fundamentals MUS 115E Brass Instrument Fundamentals MUS 115F Woodwind Instrument Fundamentals MUS 115G Guitar Fundamentals MUS 354 Musical Development of Children MUS 354C Children's Music Literature and Performance I MUS 354D Children's Music Literature and Performance II MUS 354F Music Performance, Listening, and Appreciation MUS 155C Techniques of Percussion Performance MUS 255D Techniques of String Performance MUS 255E Techniques of Brass Performance MUS 255F Techniques of Woodwind Performance MUS 255M Marching Band Techniques MUS 255V Techniques of Vocal Performance MUS 356G Choral Ensemble Literature and Performance MUS 356J Instrumental Ensemble Literature and Performance MUS 176M Special Topics in Music Studies MUS 178M, MUS 278M, MUS 378M Independent Study: Music Studies

### **Music Theory**

MUS 605 Musicianship MUS 411 Ear Training and Sight-Singing MUS 612 Structure of Tonal Music MUS 214C Beginning Composition MUS 218J Beginning Jazz Improvisation MUS 321J Twentieth-Century Musical Analysis MUS 224G Intermediate Composition MUS 224J Advanced Composition MUS 325L Counterpoint MUS 325M Counterpoint MUS 226G Orchestration and Arranging MUS 226J Orchestration and Instrumentation MUS 226K Orchestration and Instrumentation MUS 226N Choral Arranging MUS 228G Jazz Theory I MUS 228J Intermediate Jazz Improvisation MUS 228K Beginning Jazz Piano Techniques MUS 228L Jazz Theory II MUS 328M Studio Arranging MUS 228P Jazz Composition MUS 329E Introduction to Electronic Media MUS 329F Projects in Electronic Media MUS 329G Intermediate Electronic Composition MUS 329J Introduction to Computer Music MUS 329M Intermediate Computer Music MUS 164L Advanced Ear Training MUS 368L Review of Music Theory MUS 376J Special Topics in Music Theory MUS 178J, MUS 278J, MUS 378J Independent Study: Music Theory The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A.

The abbreviations used for performance courses are included in Appendix B.

### Ensemble: ENS

### **Lower-Division Courses**

### ENS 101L. Longhorn Singers.

Three laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

### ENS 101U. University Chorus.

Three laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

### ENS 102S. Symphony Orchestra.

Six laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

### ENS 102U. University Orchestra.

Two laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

### ENS 103C. Symphony Band.

Six laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

### ENS 103P. Butler Opera Center Ensemble.

Open to any University student who can qualify by audition. Instruction and performance in operatic acting, vocal coaching, and stage direction. Four laboratory hours a week for one semester, with additional laboratory hours as required. May be repeated for credit.

### ENS 103S. Wind Symphony.

Six laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

### ENS 103W. Wind Ensemble.

Six laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

### ENS 105. Sight-Reading.

Designed to develop and improve sight-reading skills in piano performance. Three laboratory hours a week for one semester. May be repeated for credit. Open to any University student who can qualify by audition.

### ENS 105C. Jazz Combos.

Two laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

#### ENS 105E. Jazz Ensemble.

Two laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

#### ENS 105M. Alternate Improvisation Music Ensemble.

Two laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

#### ENS 106C. Conjunto Ensemble.

Two laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

#### ENS 106E. Early Music Ensemble.

Two laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

#### ENS 106F. African American Vocal Ensemble.

Three laboratory hours a week for one semester, with additional laboratory hours as required. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

#### ENS 106J. Javanese Gamelan Ensemble.

Two laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

#### ENS 106K. Hispanic Caribbean Ensemble.

Two laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

#### ENS 106M. Mariachi Ensemble.

Two laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

#### ENS 106N. North Indian Music Ensemble.

Two laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

#### ENS 106T. Middle Eastern Ensemble.

Two laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

#### ENS 106U. Accompanying: Instrumental.

Designed for pianists to improve ensemble playing and to give training in the technique of instrumental accompanying. One and one-half laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

#### ENS 106V. Beginning Accompanying: Vocal.

Open to any music majors whose major instrument is piano. An introductory course for pianists designed to teach the basic skills involved in vocal accompanying. Students who want to continue study in vocal accompanying after completing Ensemble 106V should register for Ensemble 106W. One and one-half laboratory hours a week for one semester, with additional hours to be arranged.

#### ENS 106W. Advanced Accompanying: Vocal.

Restricted to music majors whose major instrument is piano. An advanced skills for pianists designed to continue to train students in vocal accompanying through more difficult repertoire. One and one-half laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Ensemble 106V or consent of instructor.

#### ENS 107J. Jazz Orchestra.

Advanced jazz ensemble. Six laboratory hours a week for one semester, with additional laboratory hours as required. May be repeated for credit. Open to any University student who can qualify by audition.

#### ENS 107K. Large Instrumental Ensemble.

Offered under various topics according to instrumentation, including Symphony Band, Symphony Orchestra, and Wind Ensemble. Six laboratory hours a week for one semester, with additional laboratory hours as required. May be repeated for credit. Open to any University student who can qualify by audition.

#### ENS 107L, 207L. Longhorn Band.

In the spring semester, this organization divides into multiple performing ensembles. For each semester hour of credit earned, the equivalent of three lab hours a week for one semester. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

#### ENS 107N. New Music Ensemble.

Two laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

#### ENS 107S. Small Instrumental Ensemble.

Offered under various topics according to instrumentation. Two laboratory hours a week for one semester, with additional laboratory hours as required. May be repeated for credit. Open to any University student who can qualify by audition.

#### ENS 108C. Texas Concert Band.

One of several Longhorn Band ensembles offered in spring semesters. Three laboratory hours a week for one semester, with additional laboratory hours as required. May be repeated for credit. Open to any University student who can qualify by audition.

#### ENS 108D. Tower Concert Band.

One of several Longhorn Band ensembles offered in spring semesters. Three laboratory hours a week for one semester, with additional laboratory hours as required. May be repeated for credit. Open to any University student who can qualify by audition.

#### ENS 108E. Longhorn Concert Band.

One of several Longhorn Band ensembles offered in spring semesters. Three laboratory hours a week for one semester, with additional laboratory hours as required. May be repeated for credit. Open to any University student who can qualify by audition.

#### ENS 108F. Orange Concert Band.

One of several Longhorn Band ensembles offered in spring semesters. Three laboratory hours a week for one semester, with additional laboratory hours as required. May be repeated for credit. Open to any University student who can qualify by audition.

#### ENS 108J. Longhorn Band Jazz Ensemble.

One of several Longhorn Band ensembles offered in spring semesters. Three laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

#### ENS 108K. Longhorn Band Percussion Ensemble.

One of several Longhorn Band ensembles offered in spring semesters. Three laboratory hours a week for one semester, with additional laboratory hours as required. May be repeated for credit. Open to any University student who can qualify by audition.

#### ENS 108M. Longhorn Band Color Guard Ensemble.

One of several Longhorn Band ensembles offered in spring semesters. Three laboratory hours a week for one semester, with additional laboratory hours as required. May be repeated for credit. Open to any University student who can qualify by audition.

#### ENS 108P. Longhorn Pep Band.

Two laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

#### ENS 109D. Percussion Ensemble.

Two laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

#### ENS 109F. Harp Ensemble.

Two laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

#### ENS 109G. Guitar Ensemble.

Two laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

#### ENS 109K. Chamber Singers.

Six laboratory hours a week for one semester, with additional laboratory hours as required. May be repeated for credit. Open to any University student who can qualify by audition.

#### ENS 109L. Concert Chorale.

Six laboratory hours a week for one semester, with additional laboratory hours as required. May be repeated for credit. Open to any University student who can qualify by audition.

#### ENS 109N. Saxophone Choir.

Two laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

#### ENS 109Q. Non-Jazz Organ Improvisation.

Restricted to music majors whose primary instrument is organ. Two laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit.

#### ENS 109R. Popular Choral Ensemble: Recording Arts.

Performing and recording pop vocal ensemble. Three laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

#### ENS 109T. Trombone Choir.

Two laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

#### ENS 109U. University of Texas Steel Pan Ensemble.

Two laboratory hours a week for one semester, with additional hours to be arranged. May be repeated for credit. Prerequisite: Open to any University student who can qualify by audition.

### Upper-Division Courses Music Business: MBU Lower-Division Courses

#### **Upper-Division Courses**

# MBU 339M. Introduction to the Music Business and Entrepreneurship.

An overview of the dynamics and business challenges of the contemporary music performance world, with an emphasis on the study of the rapidly changing musical culture and an increasingly competitive and diversified marketplace. Guest lecturers include professional conductors, directors of large performance venues, classical and pop music performers, music critics, songwriters, music publishers, entertainment law attorneys, and record producers. Three lecture hours a week for one semester. Only one of the following may be counted: Music 339M, 376C (Topic: Business of Music), Music Business 339M. Prerequisite: Upper-division standing.

#### MBU 339N. Music Entrepreneurship.

Further exploration of the dynamics and business challenges of the contemporary music performance world, with emphasis on entrepreneurial savvy, communication skills, fluency with emerging technologies, commitment to audience education, public advocacy for music, and the future health and growth of musical culture. Three lecture hours a week for one semester. Music 339N and Music Business 339N may not both be counted. Prerequisite: Upper-division standing and Music 339M or Music Business 339M.

#### MBU 347M. Music Copyright and Publishing.

Recording, music publishing, and personal management agreements and how they affect the artist and writer. Includes negotiation considerations, deal points, record company economics and profitability, intellectual property rights, publishing and the control and exploitation of publishing rights in music property, publishing activities, performing rights organizations, catalog sales and acquisitions, publisher and songwriter relations, and royalty accounting. Three lecture hours a week for one semester. Music 347M and Music Business 347M may not both be counted. Prerequisite: Upper-division standing, and credit or registration for Music 339M or Music Business 339M.

#### MBU 347N. Topics in the Business of Music and the Arts.

Three lecture hours a week for one semester. Music 347N and Music Business 347N may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing, and Music 339M or Music Business 339M.

#### MBU 377P. Internship and Final Project.

Restricted to seniors in the music business concentration. Practical experience in the music industry related to the student's area of interest within the music business. Comprehensive final project addresses entrepreneurship, as well as business elements of the music industry. Forty hours a week for one semester. Only one of the following may be counted: Music 677P, Music Business 377P, Music Recording Technology 377P. Prerequisite: Completion of the program requirements

for enrollment in an internship course and consent of the program director.

### Music Recording Technology: MRT

### **Lower-Division Courses**

#### MRT 316M. Introduction to Audio Recording.

Fundamentals of modern multitrack audio recording, including analog and digital recording, microphones and microphone techniques, basic mixing and signal processing, technology, and terminology. Three lecture hours and three laboratory hours a week for one semester. Music 316M and Music Recording Technology 316M may not both be counted. Prerequisite: Consent of instructor.

#### MRT 316N. Intermediate Audio Recording.

Intermediate techniques of modern multitrack audio recording, including stereo and remote location recording, intermediate microphone techniques, signal processing and automated mixing, and modern production techniques. Three lecture hours and three laboratory hours a week for one semester, with additional laboratory hours as required. Music 316N and Music Recording Technology 316N may not both be counted. Prerequisite: Music 316M or Music Recording Technology 316M, or consent of instructor.

### **Upper-Division Courses**

#### MRT 335M. Fundamentals of Digital Audio Workstations.

An overview of the history and theory behind digital audio and digital audio recording, including stand-alone and computer-based digital audio workstations. Three lecture hours a week for one semester. Music 335M and Music Recording Technology 335M may not both be counted. Prerequisite: Music 316N or Music Recording Technology 316N, or consent of instructor.

#### MRT 335N. Advanced Digital Audio Workstations.

Includes advanced editing, MIDI control surfaces, use of Beat Detective application, surround and synchronization, advanced mixing, plugins, third-party digital audio workstation add-ons, soft synthesizers and samplers, and digital mastering techniques and practices. Three lecture hours a week for one semester. Music 335N and Music Recording Technology 335N may not both be counted. Prerequisite: Music 335M or Music Recording Technology 335M, or consent of instructor.

#### MRT 336C. Computer Audio Production.

Desktop music production, including the history of computer music, MIDI and specialized digital audio for multimedia production, loopbased music, contemporary production styles, and music production environments. Three lecture hours a week for one semester. Music 336C and Music Recording Technology 336C may not both be counted. Prerequisite: Music 335N or Music Recording Technology 335N, or consent of instructor.

#### MRT 345. Advanced Audio Recording.

Contemporary audio recording and production styles. Advanced techniques for specific recordings and musical styles, including ensemble recording in a multitrack environment. Three lecture hours and three laboratory hours a week for one semester, with additional laboratory hours as required. Music 345 and Music Recording Technology 345 may not both be counted. Prerequisite: Music 336C or Music Recording Technology 336C, or consent of instructor.

#### MRT 377P. Internship and Final Project.

Restricted to seniors in the music recording technology concentration. Practical experience in the music recording industry related to the student's area of interest within recording technology or electronic media. Comprehensive final project addresses entrepreneurship, as well as technical elements of the music recording industry. Forty hours a week for one semester. Only one of the following may be counted: Music 677P, Music Business 377P, Music Recording Technology 377P. Prerequisite: Completion of the program requirements for enrollment in an internship course and consent of the program director.

### **Music: MUS**

### Lower-Division Courses MUS 201F. PIANO FOR TEACHERS.

Restricted to music studies students. Three laboratory hours a week for one semester MUS 201F and 376C (Topic: Piano for Teachers) may not both be counted. Offered on the letter-grade basis only. Prerequisite: MUS 201M or demonstration of equivalent proficiency.

#### MUS 201J. Beginning Class Piano for Nonmusic Majors.

Open to all University students, except music majors, who have no experience in piano. Three class hours a week for one semester. May be repeated for credit.

# MUS 201K. Second-Semester Class Piano for Nonmusic Majors.

Open to all University students, except music majors, who can fulfill the prerequisite. Three class hours a week for one semester. May be repeated for credit. Prerequisite: Credit with a grade of at least C or registration for Music 201J, or consent by audition; and consent of instructor.

#### MUS 201M. Beginning Music Performance: Class Piano.

Open only to music majors. Three laboratory hours a week for one semester. Credit granted only when taken as a secondary instrument. May be repeated for credit. Prerequisite: Ability to read music, and concurrent enrollment in Music 605A or consent of instructor. No experience on the instrument required; for those with experience, consent by audition required.

#### MUS 201N. Beginning Music Performance: Second-Semester Class Piano.

Open only to music majors. Continuation of Music 201M. Three laboratory hours a week for one semester. Credit granted only when taken as a secondary instrument. May be repeated for credit. Prerequisite: Music 201M completed the previous semester with a grade of at least C, or consent by audition.

#### MUS 101Q. Beginning Guitar Class.

Class instruction in beginning guitar performance for non-music majors or music majors studying a secondary instrument. One lecture hour a week for one semester, with additional hours to be arranged. Prerequisite: Ability to read music. Students must provide their own sixstring nylon (classical) guitar.

#### MUS 201S. Beginning Music Performance: Class Harp.

Open to all University students who can fulfill the prerequisite. Three laboratory hours a week for one semester. For music majors, credit granted only when taken as a secondary instrument. May be repeated for credit. Prerequisite: Ability to read music and consent of instructor. No previous experience on the instrument required.

# MUS 201T. Beginning Music Performance: Second-Semester Class Harp.

Open to all University students who can fulfill the prerequisite. Three laboratory hours a week for one semester. For music majors, credit granted only when taken as a secondary instrument. May be repeated for

credit. Prerequisite: Music 201S completed the previous semester with a grade of at least C, or consent by audition.

#### MUS 101V. Beginning Violin Class.

Class instruction in beginning violin performance for non-music majors or music majors studying a secondary instrument. One lecture hour a week for one semester, with additional hours to be arranged. Prerequisite: Ability to read music.

# MUS 302L (TCCN: MUSI 1306). An Introduction to Western Music.

Same as European Studies 307M. Introduction to musical styles in the Euro-American art music tradition between the Middle Ages and the present day. Designed to foster critical listening and thinking about music, and deepen understanding of the vital role that music has played and continues to play in society and in individual lives. Three lecture hours a week for one semester, with one laboratory hour a week as required. Only one of the following may be counted: European Studies 307 (Topic: Introduction to Western Music), 307M, Music 302L.

#### MUS 302P. Introductory Topics in Western Music.

May not be counted by music majors. Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### MUS 303C. Fundamentals of Music: Classroom Instruments.

Explores how music intelligently combines reading, analysis, discussion, composition, and active involvement in music making. Through analysis, performance, and practice of the pedagogy of music for children, explores the roles of music in human culture and examine music's contributions to human communication, creative expression, and wellbeing. Three lecture hours and one laboratory hour a week for one semester. Only one of the following may be counted: MUS 303C, 605, 313.

#### MUS 303D. Fundamentals of Music: Guitar.

Explores how music intelligently combines reading, analysis, discussion, composition, and active involvement in music making. Through analysis, performance, and discussion of the guitar in the folk and popular music of Western and non-Western cultures, explores music's contributions to human communication, creative expression, and well-being. Three lecture hours and one laboratory hour a week for one semester. Only one of the following may be counted: MUS 303D, 605, 313.

#### MUS 303E. Fundamentals of Music: Piano.

Explores how music intelligently combines reading, analysis, discussion, composition, and active involvement in music making. Through analysis, performance, and discussion of the piano in the folk and popular music of Western and non-Western cultures, explores music's contributions to human communication, creative expression, and well-being. Three lecture hours and one laboratory hour a week for one semester. Only one of the following may be counted: MUS 303E, 605, 313.

#### MUS 303M. Introduction to Music in World Cultures.

Same as Middle Eastern Studies 310 (Topic 5). Exploration of practices, beliefs, and issues through the study of various musical genres in the regions of Asia, the Middle East, Africa, the Pacific, Europe, and the Americas. Three lecture hours a week for one semester, with additional hours to be arranged. Only one of the following may be counted: Asian Studies 303M, Middle Eastern Studies 310 (Topic: Introduction to Music In World Cultures), 310 (Topic 5), Music 303M.

#### MUS 303N. Introduction to Popular Music in World Cultures.

Open to all University students. Exploration of practices, beliefs, and issues through the study of various mass-mediated and commercial musical genres in the regions of Asia, the Middle East, Africa, the Pacific,

Europe, and the Americas. Three lecture hours a week for one semester, with one laboratory hour a week as required. Asian Studies 303N and Music 303N may not both be counted.

#### MUS 303P. Topics in Music of World Cultures.

May not be counted by music majors. Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### MUS 605 (TCCN: MUSI 1311, MUSI 1312). Musicianship.

Study of the fundamentals of music for music majors through tonal harmony, ear training, sight-singing, keyboard drill, analysis, and composition of music. Three lecture hours and two laboratory hours a week for two semesters. Only one of the following may be counted: MUS 303C, 605, 313; MUS 303D, 605, 313; MUS 303E, 605, 313; MUS 303F, 605, 313. Prerequisite: For 605A, either satisfactory completion of the audition required for admission to the Butler School of Music and registration in class piano as assigned by the Butler School of Music, or consent of instructor; for 605B, Music 605A with a grade of at least C, and registration in class piano as assigned by the Butler School of Music or consent of instructor.

#### MUS 306M. Elements of Music.

Open to all University students except music majors. Fundamentals of music including the study of notation and the elements of rhythm, melody, and harmony; development of elementary aural skills; and writing of simple compositions. Three lecture hours a week for one semester. Music 606 and 306M may not both be counted.

#### MUS 307 (TCCN: MUSI 1310). Topics in Popular Music.

Open to all University students. Studies of the popular music of a selected culture or geographical area. Three lecture hours a week for one semester, with one laboratory hour a week as required. May be repeated for credit when the topics vary.

**Topic 1: Music of African Americans.** Same as African and African Diaspora Studies 317F (Topic 2). Introduction to the variety of modes of expression of African American culture in music and other related genres. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 317 (Topic 2: Music of African Americans), 317F (Topic 2), Music 307 (Topic 1).

Topic 2: History of Rock Music. Topic 3: Jazz Appreciation.

#### MUS 007P. String Education: Teaching and Learning.

Restricted to current String Project program instructors in the Butler School of Music. Discussion of curriculum planning, lesson observation, and program management topics, as well as guest pedagogues and master teacher presentations. One lecture hour a week for one semester. May be repeated for credit. Prerequisite: Acceptance of teaching application for the String Project program.

#### MUS 210J. Beginning Instruction in Music Performance: Third-Semester Class Piano.

Open only to music majors. Continuation of Music 201N. Three laboratory hours a week for one semester. Credit granted only when taken as a secondary instrument. May be repeated for credit. Prerequisite: Music 201N completed the previous semester with a grade of at least C, or consent by audition.

# MUS 210K. Beginning Instruction in Music Performance: Fourth-Semester Class Piano.

Open only to music majors. Continuation of Music 210J. Three laboratory hours a week for one semester. Credit granted only when taken as a secondary instrument. May be repeated for credit. Prerequisite: Music 210J completed the previous semester with a grade of at least C, or consent by audition.

# MUS 411 (TCCN: MUSI 2216, MUSI 2217). Ear Training and Sight-Singing.

Material drawn from all musical styles. Two lecture hours and one laboratory hour a week for two semesters. Prerequisite: For 411A, Music 605B with a grade of at least C, and concurrent enrollment in Music 612A; for 411B, Music 411A with a grade of at least C and concurrent enrollment in Music 612B.

# MUS 111E (TCCN: MUSI 1161). English Diction and Phonetic Translation.

Open only to music majors. Study of English diction and phonetic translation specifically for musicians. Emphasis on the International Phonetic Alphabet. One lecture hour a week for one semester.

#### MUS 311F. French for Musicians.

Open only to music majors. French language and diction specifically for musicians. Three lecture hours and one laboratory hour a week for one semester.

#### MUS 311G. German for Musicians.

Open only to music majors. German language and diction specifically for musicians. Three lecture hours and one laboratory hour a week for one semester.

#### MUS 311J. Italian for Musicians.

Open only to music majors. Italian language and diction specifically for musicians. Three lecture hours and one laboratory hour a week for one semester.

# MUS 612 (TCCN: MUSI 2311, MUSI 2312). Structure of Tonal Music.

Elements of tonal harmony and form; tonal analysis. Three lecture hours a week for two semesters, with one laboratory hour a week as required. Prerequisite: For 612A, Music 605B with a grade of at least C, concurrent enrollment in Music 411A, and registration in class piano as assigned by the Butler School of Music or consent of instructor; for 612B, Music 612A with a grade of at least C, concurrent enrollment in Music 411B, and registration in class piano as assigned by the Butler School of Music or consent of instructor.

#### MUS 312C. Music and Culture.

Issues in the performance, transmission, and reception of music in Western Europe and North America in global and comparative social and political contexts. Three lecture hours and one laboratory hour a week for one semester. Offered on the letter-grade basis only.

#### MUS 213M, 313M. History of Music I.

Restricted to music majors. The history of music from the beginning of notation to the eighteenth century. Three lecture hours and one laboratory hour a week for one semester. Offered on the letter-grade basis only. Prerequisite: Music 605 and 312C, or consent of instructor.

#### MUS 213N, 313N. History of Music II.

Restricted to music majors. The history of music from the eighteenth century to the early twentieth century. Three lecture hours and one laboratory hour a week for one semester. Offered on the letter-grade basis only. Prerequisite: Music 213M or 313M, or consent of instructor.

#### MUS 214C (TCCN: MUSI 1286). Beginning Composition.

Introduction to contemporary composition through the analysis and writing of short studies and through supervised original projects. Two lecture hours and one laboratory hour a week for one semester. May be

repeated for credit. Prerequisite: Concurrent enrollment in Music 411 and 612, or consent of instructor.

#### MUS 115D. String Instrument Fundamentals.

Beginning instruction in string instrument performance and pedagogy. This course is offered in the following instruments: double bass, viola, violin, and violoncello. Individual or class instruction in music performance. Laboratory hours as required. May not be repeated for credit on the same instrument. May not be taken by music majors in their principal instrument. Prerequisite: A major in music.

#### MUS 115E. Brass Instrument Fundamentals.

Beginning instruction in brass instrument performance and pedagogy. This course is offered in the following instruments: euphonium, French horn, trombone, trumpet, and tuba. Individual or class instruction in music performance. Laboratory hours as required. May not be repeated for credit on the same instrument. May not be taken by music majors in their principal instrument. Prerequisite: A major in music.

#### MUS 115F. Woodwind Instrument Fundamentals.

Beginning instruction in woodwind instrument performance and pedagogy. This course is offered in the following instruments: bassoon, clarinet, flute, oboe, and saxophone. Individual or class instruction in music performance. Laboratory hours as required. May not be repeated for credit on the same instrument. May not be taken by music majors in their principal instrument. Prerequisite: A major in music.

#### MUS 115G. Guitar Fundamentals.

Beginning instruction in guitar performance and pedagogy. Individual or class instruction in music performance. Laboratory hours as required. Prerequisite: A major in music or consent of instructor.

#### MUS 115T. Lower-Division Reed Making.

Individual instruction. May be repeated for credit. Prerequisite: Consent of instructor.

#### MUS 218J. Beginning Jazz Improvisation.

Study of basic jazz improvisational skills through performance of standard literature. Two class hours a week for one semester. Prerequisite: Music 605 or consent of instructor.

#### MUS 319D. Foundations of Digital Sound and Music.

Priority given to music majors, in particular composition majors. Introduction to the practice of creating music with computer technologies and the basic techniques of recording, editing and producing digital audio tracks, including introduction to musical acoustics and psychoacoustics, fundamentals of audio recording, editing, mixing, and processing, MIDI, digital audio workstations, and syncing sound to video. Three hours a week for one semester. Only one of the following may be counted: Arts and Entertainment Technologies 305, Fine Arts 310 (Topic: Foundations of Digital Sound and Music), Music 319D.

# MUS 119Q, 219Q, 319Q, 419Q, 519Q, 619Q, 719Q, 819Q, 919Q. Topics in Music.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Butler School of Music. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### MUS 420J. Junior Jazz Recital.

Preparation and performance of a half-hour public recital in the major jazz instrument. Individual instruction. Prerequisite: For jazz composition majors, course 212J in the major jazz instrument for two semesters, or the equivalent, and approval of the jazz faculty; for jazz performance majors, course 412J in the major jazz instrument for two semesters, or the equivalent, and approval of the jazz faculty.

#### MUS 220P. Practicum in a World Music Tradition.

Open to any University student who can qualify by audition. Advanced training on a non-Western musical instrument such as Javanese gender barung, Indian sitar, Arabic qanun, or Korean kayakeum, or advanced training in a non-Western vocal style, and other approved musical practices. Two lecture hours a week for one semester. May be repeated for credit. Prerequisite: Upper-division standing; two semesters of enrollment in a non-Western music ensemble, such as Javanese Gamelan, Middle Eastern or North Indian Music ensemble, or other approved music ensembles, and consent of instructor.

#### MUS 420R. Junior Recital.

Preparation and performance of a half-hour public recital in the major instrument. Individual instruction. Prerequisite: Performance 312 in the major instrument for four semesters, or Voice 210 for four semesters, or the equivalent; and approval of the faculty.

#### MUS 321J. Twentieth-Century Musical Analysis.

Introduction to the theory and practice of music since 1900. Includes various analytical approaches to the wide range of musical styles developed over the course of the twentieth- and twenty-first centuries, as well as the music of mainstream twentieth century composers and living composers. Both analytical and aural skills are emphasized. Three lecture hours a week for one semester. Prerequisite: Music 411 and 612.

#### MUS 222J. Instrumental Conducting.

Designed for those who have had no experience in conducting. Includes rudimentary use of baton, regular and irregular beat patterns, subdivisions and beat pattern variations as applied to simple instrumental literature, and practical experience in conducting instrumental groups. Two class hours a week for one semester. Prerequisite: Upper-division standing in music or consent of instructor.

#### MUS 222K. Instrumental Conducting.

Continuation of Music 222J. Further technical study in irregular meters, polyrhythmic and polymetrical patterns and scores; emphasis on expressive gestures, phrasal and compound beat conducting. Two class hours a week for one semester. Prerequisite: Music 222J or consent of instructor.

#### MUS 223J. Choral Conducting.

Designed for those who have had no experience in conducting. Includes regular and irregular beat patterns, subdivisions and beat pattern variations as applied to simple choral literature, and practical experience in conducting vocal groups. Two class hours a week for one semester. Prerequisite: Upper-division standing in music.

#### MUS 223K. Choral Conducting.

Continuation of Music 223J. Further technical study in irregular meters, polyrhythmic and polymetrical patterns and scores; emphasis on expressive gestures, phrasal and compound beat conducting. Two class hours a week for one semester. Prerequisite: Music 223J or consent of instructor.

#### MUS 224G. Intermediate Composition.

Continuation of Music 214C. The equivalent of two lecture hours and one laboratory hour a week for one semester. May be repeated for credit. Prerequisite: Music 214C with a grade of at least B, and approval of the music theory and composition faculty.

#### MUS 224J. Advanced Composition.

Continuation of Music 224G for composition majors only. The equivalent of two lecture hours and one laboratory hour a week for one semester. With consent of the music theory and composition faculty, may be repeated for credit. Prerequisite: Music 224G with a grade of at least B, and approval of the music theory and composition faculty.

#### MUS 325L. Counterpoint.

Development of contrapuntal skill in sixteenth-century style and in related late-twentieth-century styles; the teaching of counterpoint, including Fuxian species. Three lecture hours a week for one semester. Prerequisite: Music 411 and 612.

#### MUS 325M. Counterpoint.

Analysis of eighteenth-century inventions, fugues, and passacaglias; development of contrapuntal skills in twentieth-century styles that draw on these historical models; the teaching of counterpoint. Three lecture hours a week for one semester.

#### MUS 226G. Orchestration and Arranging.

Techniques of instrumentation, arranging, and orchestration for band, orchestra, and chamber ensembles. Two lecture hours a week for one semester. Prerequisite: Music 411 and 612.

#### MUS 226J. Orchestration and Instrumentation.

Study of the characteristics of individual instruments; writing for various combinations; study of scores of different periods; listening to recordings and live performances. Two lecture hours a week for one semester. Prerequisite: Music 411 and 612.

#### MUS 226K. Orchestration and Instrumentation.

Continuation of Music 226J. Two lecture hours a week for one semester. Prerequisite: Music 226J.

#### MUS 226N. Choral Arranging.

Techniques of voicing and arranging for choirs, vocal ensembles, and vocal chamber groups. Two lecture hours a week for one semester. Prerequisite: Music 411 and 612.

#### MUS 228G. Jazz Theory I.

Study of the elements of jazz and popular styles, with emphasis on written theory and keyboard skills. Two lecture hours a week for one semester. Prerequisite: Music 201N and 605, or consent of instructor.

#### MUS 228J. Intermediate Jazz Improvisation.

Continuation of Music 218J. Two class hours a week for one semester. Prerequisite: Music 201N, 605, 218J, and 228G; or consent of instructor.

#### MUS 228K. Beginning Jazz Piano Techniques.

Designed for music majors (pianists and nonpianists) seeking basic skills in chord notation, chord interpretation and voicing, voice leading, and chord and scale relationships for improvisation. Three laboratory hours a week for one semester. Prerequisite: Music 210K and 612, or consent of instructor.

#### MUS 228L. Jazz Theory II.

Continuation of the concepts taught in Music 228G, with an emphasis on ear training, harmonic motion of jazz, and harmonic embellishment. Two lecture hours a week for one semester. Prerequisite: Music 228G.

#### MUS 328M. Studio Arranging.

Techniques of composing and arranging for standard jazz and popular music instrumental combinations in varied styles. Three lecture hours a week for one semester. With consent of instructor, may be repeated for credit. Prerequisite: Music 612 and 228G, or consent of instructor.

#### MUS 228P. Jazz Composition.

Individual instruction in the creative process of composition, involving the melodic, harmonic, and rhythmic components of various jazz styles. Individual instruction. May be repeated for credit. Prerequisite: Music 328M or consent of instructor.

#### MUS 329E. Introduction to Electronic Media.

Introduction to the fundamentals of recording, tape editing, and electronic music synthesis. Three lecture hours and six laboratory hours a week for one semester. Prerequisite: Upper-division standing and consent of instructor.

#### MUS 329F. Projects in Electronic Media.

Continuation of Music 329E for nontheory and noncomposition majors. One and one-half lecture hours and eight laboratory hours a week for one semester. May be repeated for credit. Prerequisite: Music 329E and consent of instructor.

#### MUS 329G. Intermediate Electronic Composition.

Continuation of Music 329E for music theory or composition majors. Three lecture hours and six laboratory hours a week for one semester. May be repeated for credit. Prerequisite: Music 329E and consent of instructor.

#### MUS 329J. Introduction to Computer Music.

An introduction to the basic concepts of digital music synthesis and signal processing. One and one-half lecture hours and eight laboratory hours a week for one semester. Arts and Entertainment Technologies 331 and Music 329J may not both be counted. Prerequisite: Music 329E and consent of instructor.

#### MUS 329M. Intermediate Computer Music.

Continuation of Music 329J. One and one-half lecture hours and eight laboratory hours a week for one semester. Arts and Entertainment Technologies 332 and Music 329M may not both be counted. May be repeated for credit. Prerequisite: Music 329J and consent of instructor.

# MUS 129Q, 229Q, 329Q, 429Q, 529Q, 629Q, 729Q, 829Q, 929Q. Topics in Music.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Butler School of Music. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### MUS 230L, 330L. History of Music III.

Restricted to music majors. The history of music from the early twentieth century to the present. Three lecture hours and one laboratory hour a week for one semester. Offered on the letter-grade basis only. Prerequisite: Music 213N or 313N, or consent of instructor.

#### MUS 331J. Advanced Studies in Music Theory.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: MUS 612 and 313N, or upper-division standing and consent of instructor.

#### MUS 334. The Music of the Americas.

Studies of both indigenous and borrowed traditions in the popular, folk, and art music of the Americas from the colonial period to the present. Three lecture hours a week for one semester, with one laboratory hour a week as required. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 1: Music of Mexico and the Caribbean.** Same as African and African Diaspora Studies 374F (Topic 22) and Latin American Studies 326 (Topic 1). Introduction to the history of Mexican and Caribbean traditional and commercial music, with some discussion of classical music as well. Attention will be given to music of indigenous, African, European, and mixed origin. Mexico and the Spanish-speaking Caribbean receive special attention. Class meetings will be divided into lecture/discussion segments, videos, listening, and performance instruction/demonstration. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Music of Mexico and the Caribbean), 374F (Topic 22), Latin American Studies 322 (Topic: Music of Mexico and the Caribbean), 326 (Topic 1), Music 334 (Topic 1). Prerequisite: Upper-division standing.

**Topic 2: Music of Latin America.** Same as Latin American Studies 326 (Topic 2). Only one of the following may be counted: Latin American Studies 322 (Topic: Music of Latin America), 326 (Topic 2), Music 334 (Topic 2).

**Topic 3: Music of Brazil and Argentina.** Same as Latin American Studies 326 (Topic 3). An introduction to Brazilian and Argentine music from samba, capoeira, and forro to tango, cumbia villera, and chacarera; examines such music making within its various historical, social, and political contexts. Uses course readings, lectures, listening assignments, performance attendance, and movie screenings to analyze themes including nationalism and ethnicity, globalization and development, and democracy and social justice. Only one of the following may be counted: Latin American Studies 322 (Topic: Music of Brazil and Argentina), 326 (Topic 3), Music 334 (Topic 3). Prerequisite: Upper-division standing.

**Topic 4: Music of the Andean Countries.** Same as Latin American Studies 326 (Topic 4). Introduction to the music of Andean countries including Colombia, Ecuador, Peru, Bolivia, and Chile. Explores the role music plays in shaping historical and modern Andean societies, as well as how music comments upon national culture, society, and politics, with particular attention to the ways in which musicians and musical movements continue to influence Andean societies. Subjects include pre-Columbian and colonial music making; music representative of the tripartite indigenous, African, and Iberian heritage of Andean countries; aesthetics, identity, and musical expression; ritual, religion, and the politics of musical performance. Only one of the following may be counted: Latin American Studies 322 (Topic: Music of the Andean Countries), 326 (Topic 4), Music 334 (Topic 4).

**Topic 5: The Music of the African Diaspora.** Same as African and African Diaspora Studies 374F (Topic 8) and Latin American Studies 326 (Topic 5). The musical legacy of the African slave trade in the Americas, the social contexts in which black musical forms have developed, and their varied forms. Subjects include the shifting meanings of "black music" in various contexts; the notion of hybridity; the uses of African influenced music as a political or oppositional tool; and African ethnic groups represented prominently in the New World, the traditions they brought with them, and the ways they have been adapted to new ends. Three lecture hours and one laboratory hour a week for one semester. Only one of the following may be counted:

African and African Diaspora Studies 374F (Topic: Music of the African Diaspora), 374F (Topic 8), Latin American Studies 326 (Topic: Music of the African Diaspora), 326 (Topic 5), Music 334 (Topic: Music of the African Diaspora), 334 (Topic 5).

#### MUS 337. Music and Film Sound.

History of music and the soundtrack; analysis of interactions between image and sound; and aesthetics and issues of production and postproduction. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### MUS 338. Masterpieces of Music.

Study of the works of specific composers or of specific genres in the Western musical tradition. Three lecture hours a week for one semester. May not be counted by music majors. May be repeated for credit when the topics vary. Prerequisite: Music 302L or consent of instructor.

#### MUS 342. Area Studies in Ethnomusicology.

Studies of the musical traditions of selected cultures or geographical areas. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 3: Musics of India.** Same as Anthropology 324L (Topic 13: Musics of India) and Asian Studies 361 (Topic 11: Musics of India). Prerequisite: Upper-division standing.

**Topic 5: Black Perspectives in Jazz.** Same as African and African Diaspora Studies 372E (Topic 12). Explores the social, cultural, political, and artistic relationships between jazz and the black experience, both within the African American context and throughout the diaspora. Only one of the following may be counted: African and African Diaspora Studies 372E (Topic 12), 374 (Topic 10: Black Perspectives in Jazz), Music 342 (Topic 5).

**Topic 6: Musics of East and Southeast Asia**. Asian Studies 361 (Topic 15) and Music 342 (Topic 6) may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 7: Introduction to the Music of the Middle East.** Same as Jewish Studies 363 (Topic 21). Only one of the following may be counted: Islamic Studies 373 (Topic: Introduction to Music of the Middle East), Jewish Studies 363 (Topic: Introduction to Music of the Middle East), 363 (Topic 21), Middle Eastern Languages and Cultures 321 (Topic: Introduction to Music of the Middle East), Middle Eastern Studies 328 (Topic: Introduction to Music of the Middle East), 342 (Topic: Introduction to Music of the Middle East), Music 342 (Topic: Introduction to Music of the Middle East), 342 (Topic: Introduction to Music of the Middle East), 342 (Topic:

#### MUS 343J. History of Jazz.

Survey of the history of jazz from its origins to the present. Three lecture hours a week for one semester. Prerequisite: Upper-division standing in music or consent of instructor.

# MUS 350S. Creating Music and Sound for Film, Video, and Games.

Priority given to music composition majors. Designed to introduce students to concepts of music and sound for a variety of media with a primary focus on creating original music and/or soundtracks. Subjects include music structures, production and editing, film and video synchronization, game audio, and other sound for film related topics. Three lecture hours a week for one semester. Arts and Entertainment Technologies 323 and Music 350S may not both be counted. Prerequisite: Music 319D with a grade of at least C, and consent of instructor.

#### MUS 354. Musical Development of Children.

The processes of musical development in young children. Topics include music in multicultural contexts, music in the cognitive and social

development of young children, and special issues concerning music and exceptional children. Three lecture hours a week for one semester. Prerequisite: Upper-division standing or consent of instructor.

#### MUS 354C. Children's Music Literature and Performance I.

Literature, materials, and music performance activities appropriate for young children. Three lecture hours and one laboratory hour a week for one semester. Prerequisite: Music 605 or 313, upper-division standing in music studies, or consent of instructor.

#### MUS 354D. Children's Music Literature and Performance II.

Continuation of Music 354C. Three lecture hours a week for one semester. Prerequisite: Music 354C or consent of instructor.

#### MUS 354F. Music Performance, Listening, and Appreciation.

Techniques and materials for the development of skill in composition, arranging, performance, and aural discrimination; problems related to the adolescent voice. Three lecture hours and one laboratory hour a week for one semester.

# MUS 354S. Game Development Capstone: Two-Dimensional Games.

Same as Computer Science 354S and Theatre and Dance 354T (Topic 17). Participation in an interdisciplinary team to gain a thorough understanding of the two-dimensional game development process, through modeling of the environment and practices that are used in game studios. Three lecture hours a week for one semester. Only one of the following may be counted: Computer Science 354S, 378 (Topic: Game Development Capstone: 2D Games), Music 354S, 376J (Topic: Game Development Capstone: 2D Games), Theatre and Dance 354T (Topic 17). Prerequisite: For computer science majors, Computer Science 429 or 429H with a grade of at least C- and consent of instructor; for others, consent of instructor.

# MUS 354T. Game Development Capstone: Three-Dimensional Games.

Same as Computer Science 354T and Theatre and Dance 354T (Topic 18). Participation in interdisciplinary teams to gain a thorough understanding of the three-dimensional game development process, through modeling of the environment and practices that are used in game studios. Three lecture hours a week for one semester. Only one of the following may be counted: Computer Science 354T, Music 354T, 376J (Topic: Game Development Capstone: 3D Games), Theatre and Dance 354T (Topic 18). Prerequisite: For computer science majors, Computer Science 429 or 429H with a grade of at least C- and consent of instructor; for others, consent of instructor.

#### MUS 155C. Techniques of Percussion Performance.

Percussion performance techniques for individual and ensemble settings, including appropriate literature and rehearsal procedures. Two laboratory hours a week for one semester. Prerequisite: Upper-division standing in music studies.

#### MUS 255D. Techniques of String Performance.

String instrument performance techniques for individual and ensemble settings, including appropriate literature and rehearsal procedures. Two lecture hours a week for one semester. Prerequisite: Upper-division standing in music studies.

#### MUS 255E. Techniques of Brass Performance.

Brass instrument performance techniques for individual and ensemble settings, including appropriate literature and rehearsal procedures. Two lecture hours a week for one semester. Prerequisite: Upper-division standing in music studies.

#### MUS 255F. Techniques of Woodwind Performance.

Woodwind instrument performance techniques for individual and ensemble settings, including appropriate literature and rehearsal procedures. Two lecture hours a week for one semester. Prerequisite: Upper-division standing in music studies.

#### MUS 255M. Marching Band Techniques.

Literature, materials, and techniques of the marching band. Two lecture hours and one laboratory hour a week for one semester. Prerequisite: Upper-division standing in music studies.

#### MUS 255V. Techniques of Vocal Performance.

Technique of individual and ensemble singing practiced through the study of vocal literature. Two lecture hours a week for one semester. Prerequisite: Upper-division standing in music studies.

# MUS 356G, 456G. Choral Ensemble Literature and Performance.

Choral music literature; rehearsal and performance techniques for choirs and small ensembles. One lecture hour a week for each credit hour earned and one lab hour a week for one semester. Prerequisite: Upperdivision standing in music studies or consent of instructor.

# MUS 356J. Instrumental Ensemble Literature and Performance.

Study of the literature and of performance and rehearsal techniques for heterogeneous instrumental ensembles. Three lecture hours and one laboratory hour a week for one semester. Prerequisite: Upper-division standing in music studies and Music 210K.

#### MUS 259C. Chamber Music: Brass.

Restricted to music majors. The equivalent of two lecture hours and one laboratory hour a week for one semester. May be repeated for credit. Prerequisite: Upper-division standing, Music 411 and 612, and consent of instructor.

#### MUS 259E. Chamber Music: Percussion.

Restricted to music majors. The equivalent of two lecture hours and one laboratory hour a week for one semester. May be repeated for credit. Prerequisite: Upper-division standing, Music 411 and 612, and consent of instructor.

#### MUS 159J. Harp Repertoire.

Study and performance of the harp repertoire. One laboratory hour a week for one semester. May be repeated for credit. Prerequisite: Consent of instructor.

#### MUS 259L. Vocal Repertoire Coaching.

Two lecture hours and one laboratory hour a week for one semester. May be repeated for credit. Prerequisite: Consent of instructor.

#### MUS 259N. Chamber Music: Strings and Piano.

The equivalent of two lecture hours and one laboratory hour a week for one semester. May be repeated for credit. Prerequisite: Upper-division standing, Music 411 and 612, and consent of instructor.

#### MUS 259R. Chamber Music: Saxophone.

Restricted to music majors. The equivalent of two lecture hours and one laboratory hour a week for one semester. May be repeated for credit. Prerequisite: Upper-division standing, Music 411 and 612, and consent of instructor.

#### MUS 259T. Topics in Instrumental Technology.

Two lecture hours and one laboratory hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Consent of instructor.

#### MUS 259W. Chamber Music: Woodwinds.

Restricted to music majors. The equivalent of two lecture hours and one laboratory hour a week for one semester. May be repeated for credit. Prerequisite: Upper-division standing, Music 411 and 612, and consent of instructor.

#### MUS 160C. Senior Composition Recital.

Open only to music composition majors. Preparation and performance of a thirty-minute public recital of the student's original compositions. Individual instruction.

#### MUS 460J. Senior Jazz Recital.

Open only to jazz performance majors. Preparation and performance of a one-hour public recital in the major jazz instrument. Individual instruction. Prerequisite: Music 420J and approval of the jazz faculty.

#### MUS 460R. Senior Recital.

Open only to music performance majors. Preparation and performance of a one-hour public recital in the major instrument. Individual instruction. Prerequisite: For performance majors approved to pursue a pedagogy emphasis, approval of the faculty; for other performance majors, Music 420R and approval of the faculty.

#### MUS 262C. Intermediate Instrumental Conducting.

Problems and interpretation of larger band and orchestral works; analytical study of musical form as it relates to conducting; a synthesis of musical understanding and expansion of comprehensive musicianship through conducting problems. Two lecture hours and one laboratory hour a week for one semester. May be repeated for credit. Prerequisite: Upperdivision standing and Music 222K.

#### MUS 164L, 364L. Advanced Ear Training.

Further development of techniques taught in Music 411, with emphasis on aural recognition of larger musical forms and of music of contemporary style. For each semester hour of credit earned, one lecture hour a week for one semester. Prerequisite: Upper-division standing in music and Music 411 and 612.

#### MUS 366P. Senior Piano Pedagogy Project.

Open only to senior piano performance majors pursuing the pedagogy option. Students complete a research paper on a piano pedagogy topic, such as methodology, skills development, or repertoire. Individual instruction. Prerequisite: Upper-division standing and Music 460P with a grade of at least B.

#### MUS 368L. Review of Music Theory.

An intensive review of the skills and concepts required for the study of music theory at the graduate level. Three lecture hours a week for one semester. May not be counted toward a graduate degree. Prerequisite: Upper-division or graduate standing in music.

#### MUS 271P. Pedagogy.

Designed primarily for students planning teaching careers. Offered in piano, voice, and orchestral instruments. Methods include individual and class instruction through the use of music literature and the teaching repertoire. Practice teaching and laboratory for diagnostic and corrective methods are required. Two lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing. Topic 1: Pedagogy: Piano I. Topic 2: Pedagogy: Piano II. Topic 3: Pedagogy: Voice I. Topic 4: Pedagogy: Voice II. Topic 5: Pedagogy: Orchestral Instruments I. Topic 6: Pedagogy: Orchestral Instruments II.

#### MUS 375J. Twentieth-Century Music Techniques.

Restricted to music majors. Review of techniques and methods for analyzing twentieth-century music. Three lecture hours a week for one semester. Music 375J and Music 376J (Topic 1) may not both be counted. Offered on the letter-grade basis only.

#### MUS 275T. Teaching and Learning in Music.

Restricted to music majors. Two lecture hours a week for one semester. Prerequisite: Upper-division standing

# MUS 176C, 276C, 376C. Special Topics in Music Performance.

For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and consent of instructor.

#### MUS 376G. Special Topics in Music Literature.

Three class hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and consent of instructor.

#### MUS 376J. Special Topics in Music Theory.

Three class hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and consent of instructor.

**Topic 2: Performance, Analysis, and Interpretation.** Restricted to music majors. Undergraduate music theory seminar applying theoretical and historical insights to performance and interpretation. Three lecture hours a week for one semester. Music 376J (Topic 2) and Music 379K (Topic: Performance and Analysis) may not both be counted. Offered on the letter-grade basis only. Prerequisite: Upper-division standing or consent of instructor.

#### MUS 176M. Special Topics in Music Studies.

One class hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and consent of instructor.

#### MUS 176R. Guitar Repertory.

Restricted to music majors whose primary instrument is guitar. One lecture hour a week for one semester. May be repeated for credit. Prerequisite: Upper-division standing.

#### MUS 276S. Bassoon Literature.

Restricted to music majors. Two lecture hours a week for one semester. May be repeated for credit. Prerequisite: Upper-division standing

#### MUS 276T. Flute Literature.

Restricted to music majors. Two lecture hours a week for one semester. May be repeated for credit. Prerequisite: Upper-division standing

#### MUS 276U. French Horn Literature.

Restricted to music majors. Two lecture hours a week for one semester. May be repeated for credit. Prerequisite: Upper-division standing

#### MUS 276V. Oboe Literature.

Restricted to music majors. Two lecture hours a week for one semester May be repeated for credit. Prerequisite: Upper-division standing

#### MUS 677P. Internship and Final Project.

Restricted to seniors. Practical experience in the music and recording industry related to the student's area of interest within the music business, recording technology, or electronic media. Comprehensive final project addresses entrepreneurship, as well as technical and business elements of the music and recording industry. Forty hours a week for one semester. Prerequisite: Completion of the program requirements for enrollment in an internship course and consent of the program director.

# MUS 178C, 278C, 378C. Independent Study: Music Performance.

Individual projects to be completed under faculty supervision. For each semester hour of credit earned, the equivalent of one class hour a week for one semester. May be repeated for credit. Prerequisite: Upper-division standing and consent of instructor and the director of the school.

#### MUS 178G, 278G, 378G. Independent Study: Music Literature.

Individual projects to be completed under faculty supervision. For each semester hour of credit earned, the equivalent of one class hour a week for one semester. May be repeated for credit. Prerequisite: Upper-division standing and consent of instructor and the director of the school.

#### MUS 178J, 278J, 378J. Independent Study: Music Theory.

Individual projects to be completed under faculty supervision. For each semester hour of credit earned, the equivalent of one class hour a week for one semester. May be repeated for credit. Prerequisite: Upper-division standing and consent of instructor and the director of the school.

#### MUS 178M, 278M, 378M. Independent Study: Music Studies.

Individual projects to be completed under faculty supervision. For each semester hour of credit earned, the equivalent of one class hour a week for one semester. May be repeated for credit. Prerequisite: Upper-division standing and consent of instructor and the director of the school.

#### MUS 379K. Advanced Topics in Music Literature.

Three lecture hours a week for one semester. Two or more topics may be taken concurrently. May be repeated for credit when the topics vary. Prerequisite: Music 612 and 313N, or upper-division standing and consent of instructor.

- Topic 1: Topics in Keyboard Literature.
- Topic 2: Piano Literature, Eighteenth Century to the Present.
- Topic 5: Topics in Instrumental Chamber Music.
- Topic 6: Topics in Symphonic Tradition.
- Topic 7: Topics in Instrumental Concerto.
- Topic 8: Topics in the Art Song.
- Topic 9: Topics in Opera and Music Drama.
- Topic 10: Topics in Mass and Motet.
- Topic 11: Topics in Choral Music.
- Topic 12: Topics in Cantata and Oratorio.
- Topic 13: Topics in Modern Music.
- Topic 14: Special Topics in the Western Musical Tradition.
- Topic 17: Band Literature.

#### Performance: PRF

#### **Lower-Division Courses**

#### PRF 201. Lower-Division Music Performance: Secondary.

Individual instruction in music performance for nonmusic majors and for music majors studying a secondary instrument. This course is offered in the following instruments: bassoon, clarinet, double bass, euphonium, flute, French horn, guitar, harp, oboe, organ, percussion, piano, recorder, saxophone, trombone, trumpet, tuba, viola, violin, violoncello, and voice. Individual instruction. May be repeated for credit. Prerequisite: The ability to read music, and, for most instruments, an audition. For Guitar 201, at least two years of classical guitar lessons. For Piano 201, at least one year of piano lessons.

## PRF 202. Lower-Division Piano: Secondary.

Individual instruction beyond Music 210K. May be repeated for credit when the topics vary. Prerequisite: Consent by audition.

## PRF 210. Lower-Division Music Performance: Principal.

Individual instruction in the principal instrument for students pursuing the Bachelor of Arts in Music or the Bachelor of Music with a major in music studies, music theory, composition, music literature, or music performance. This course is offered in the following instruments: bassoon, clarinet, double bass, euphonium, flute, French horn, guitar, harp, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, violoncello, and voice. Individual instruction. May be repeated for credit. Prerequisite: For Organ 210, Piano 201 or the equivalent.

## PRF 212, 312. Lower-Division Music Performance: Major.

Individual instruction in music performance for students majoring in music performance or music performance pedagogy. This course is offered in the following instruments: bassoon, clarinet, double bass, euphonium, flute, French horn, guitar, harp, harpsichord, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, and violoncello. Individual instruction. May be repeated for credit.

# PRF 212J, 312J, 412J. Lower-Division Music Performance: Improvisation.

Individual instruction in improvisation for students majoring in jazz composition or jazz performance. This course is offered in the following instruments: double bass, drum set, guitar, piano, saxophone, trombone, trumpet, and vibraphone. Individual instruction. May be repeated for credit.

## **Upper-Division Courses**

## PRF 251. Upper-Division Music Performance: Secondary.

Individual instruction in music performance for nonmusic majors and for music majors studying a secondary instrument. This course is offered in the following instruments: bassoon, clarinet, double bass, euphonium, flute, French horn, guitar, harp, harpsichord, oboe, organ, percussion, piano, recorder, saxophone, trombone, trumpet, tuba, viola, violin, violoncello, and voice. Individual instruction. May be repeated for credit. Prerequisite: Course 201 in the secondary instrument for four semesters, or the equivalent, and approval of the area faculty.

## PRF 260. Upper-Division Music Performance: Principal.

Individual instruction in the principal instrument for students pursuing the Bachelor of Arts in Music or the Bachelor of Music with a major in music studies, music theory, composition, music literature, or music performance. This course is offered in the following instruments: bassoon, clarinet, double bass, euphonium, flute, French horn, guitar, harp, harpsichord, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, violoncello, and voice. Individual instruction. May be repeated for credit. Prerequisite: Course 210 in the principal instrument for four semesters, or the equivalent, and approval of the music faculty.

## PRF 262, 362. Upper-Division Music Performance: Major.

Individual instruction in music performance for students majoring in music performance. This course is offered in the following instruments: bassoon, clarinet, double bass, euphonium, flute, French horn, guitar, harp, harpsichord, oboe, organ, percussion, piano, saxophone, trombone, trumpet, tuba, viola, violin, violoncello, and voice. Individual instruction. May be repeated for credit. Prerequisite: For Voice 462, Voice 210 for four semesters, or the equivalent, and approval of the music faculty; for other instruments, course 412 in the major instrument for four semesters, or the equivalent, and approval of the music faculty.

# PRF 262J, 362J. Upper-Division Music Performance: Improvisation.

Individual instruction in improvisation for students majoring in jazz composition and jazz performance. This course is offered in the following instruments: double bass, drum set, guitar, piano, saxophone, trombone, trumpet, and vibraphone. Individual instruction. May be repeated for credit. Prerequisite: For jazz composition majors, course 212J for two semesters, or the equivalent, and approval of the appropriate music faculty; for jazz performance majors, course 412J for two semesters, or the equivalent, and approval of the appropriate music faculty.

# School of Design and Creative Technologies

## Arts and Entertainment Technologies: AET

## **Lower-Division Courses**

## AET 101. Arts and Entertainment Technologies Colloquium I.

Restricted to students in the College of Fine Arts. Guest artists, scientists, developers, and corporate leaders present on subjects applicable to arts and entertainment technologies. The equivalent of one lecture hour a week for one semester. Offered on the pass/fail basis only.

## AET 102. Arts and Entertainment Technologies Colloquium II.

Restricted to students in the College of Fine Arts. Guest artists, scientists, developers, and corporate leaders present on subjects applicable to arts and entertainment technologies. The equivalent of one lecture hour a week for one semester. Offered on the pass/fail basis only.

# AET 103. Arts and Entertainment Technologies Colloquium III.

Restricted to students in the College of Fine Arts. Guest artists, scientists, developers, and corporate leaders present on topics applicable to arts and entertainment technologies. The equivalent of one lecture hour a week for one semester. Offered on the pass/fail basis only.

# AET 304. Foundations of Arts and Entertainment Technologies.

Broad overview of digital media technologies, software, and applications associated with the intersection of the arts and technology. Introduction to the core concepts of the three emphases of the Center for Arts and Entertainment Technologies: Music and Sound, New Performance Technologies, and Game and Mobile Media Applications. Also considers the cultural, philosophical, ethical, and practical aspects of entertainment technology. The equivalent of three lecture hours a week for one semester.

## AET 305. Foundations of Music Technology.

Restricted to students in the College of Fine Arts. Historical perspective of music technology supported by a hands-on focus on modern digital technologies that comprise the world of electronic music, including MIDI, the digital audio workstation, digital signal processing, virtual instruments, digital audio systems, recording, effects, and internet distribution. Three lecture hours a week for one semester, with studio hours as required. Only one of the following may be counted: Arts and Entertainment Technologies 305, Fine Arts 310 (Topic: Foundations of Digital Music and Sound), Music 319D. Prerequisite: Arts and Entertainment Technology 304.

## AET 306. Foundations of Digital Imaging and Visualization.

Restricted to students in the College of Fine Arts. Historical developments in raster and vector graphics and examination of techniques and technologies of 2-D, 3-D, moving image creation, manipulation, projection, and distribution. Three lecture hours a week for one semester, with studio hours as required. Prerequisite: Arts and Entertainment Technologies 304.

## AET 308. Music, Technology and Culture.

Explores the history of technology and culture while focusing critically on the impact technology has on music and how we experience it. Particular emphasis on the impact music technology has had on global culture. The equivalent of three lecture hours a week for one semester.

## AET 309. Being Digital.

Reviews the essential ideas of digital devices and social networks. Provides a general background on computer devices today: computers, hardware, software, the Internet, and information security. The equivalent of three lecture hours a week for one semester.

## AET 310. Foundations of Creative Coding.

A guide for expressing original ideas directly in computer code using the graphics language Processing. Examines the making of computer tools for implementing artistic visions. Explores the computer's role as an artist's medium in the context of major ideas in contemporary art. Three lecture hours a week for one semester, with studio hours as required.

## AET 316. Foundations of New Performance Technologies.

Introduction to the basic concepts and methods, as well as common systems used in the field of New Performance Technology. Discussion of core technologies and how each area of work within NPT relates is connected to the others. Explores tools and techniques prevalent in four specific applications of NPT: 3-D projection mapping, intelligent led lights & pixel mapping, interactive & generative imagery, 3-D previsualization. Subjects include the historical landmarks of interactive performance, projection system design, media servers, common signal and data formats, imagery creation for live performance and current trends in live event technology. Three lecture hours a week for one semester, with studio hours as required. Arts and Entertainment Technologies 316 and 317 may not both be counted. Prerequisite: Arts and Entertainment Technologies 304.

### AET 318. Foundations of Games and Playable Apps.

Introduction to concepts of game play, game narrative, user-interaction, modeling, and animation. Historical examination of game genres, systems, and games from a cultural and gender perspective. Three lecture hours a week for one semester, with studio hours as required. Prerequisite: Arts and Entertainment Technologies 304.

# AET 119, 219, 319. Topics in Arts and Entertainment Technologies.

For each semester hour of credit earned, the equivalent of one lecture hour per week for one semester. May be repeated for credit when the topics vary.

## **Upper-Division Courses**

## AET 320C. Contemporary Music Styles.

Explores the form, composition, production, arrangement and performance of a variety of contemporary styles of music. Focuses on the digital audio workstation and the use of instruments, both real and virtual, to compose in different genres. Three lecture hours a week for one semester, with studio hours as required. Arts and Entertainment Technologies AET 320 and 320C may not both be counted. Prerequisite: Arts and Entertainment Technologies 305.

## AET 321. Multitrack Recording, Mixing, and Mastering.

Exploration of sound recording of live performance, including microphone placement, equalizing (EQ), compression techniques, mixing, localization strategies, and final product mastering. Three lecture hours a week for one semester, with studio hours as required. Prerequisite: Arts and Entertainment Technologies 305.

## AET 322C. Sonic Branding.

Explores the relationship between sound and music, brand identity, UI/ UX, and advertising. Three lecture hours a week for one semester, with studio hours as required. Arts and Entertainment Technologies 322 and 322C may not both be counted. Prerequisite: Arts and Entertainment Technology 305.

## AET 323. Film and Game Scoring.

Exploration of film and game play situations requiring music in the form of an instrumental score or created with virtual instruments. Comparative study of music tracks in popular film genres, documentary films, console game titles, and games as a reference for original works. Three lecture hours a week for one semester, with studio hours as required. Arts and Entertainment Technologies 323 and Music 350S may not both be counted. Prerequisite: Arts and Entertainment Technologies 305.

## AET 325. Digital Production Art 2-D.

Two-dimensional digital drawing and painting techniques with computer software. Three lecture hours a week for one semester, with studio hours as required. Prerequisite: Arts and Entertainment Technologies 306.

## AET 326. Digital Production Art 3-D.

Basic principles of three-dimensional digital modeling and animation production, including modeling and texturing, basic character animation, project conception through digital production methodology, and technical language used in industry. Three lecture hours a week for one semester, with studio hours as required. Prerequisite: Arts and Entertainment Technologies 306.

### AET 327. Advanced 3-D Modeling.

Continued exploration of methods and procedures used in the professional production of 3-D modeling, animation, and visual effects, including advanced modeling techniques, advanced surfacing techniques, specularity, sequenced mapping, and 3-D digital printing. Three lecture hours a week for one semester, with studio hours as required. Prerequisite: Arts and Entertainment Technologies 326.

## AET 328. Animation and Rigging.

3-D character rigging, animation armatures of joints, forward and inverse kinematics, types of 3-D character deformations, facial animations, bipedal character rigging and animation, and exploration into 3-D production animation environments. Three lecture hours a week for one semester, with studio hours as required. Prerequisite: Arts and Entertainment Technologies 306.

## AET 329. Media for Live Performance.

Introduction to the production and integration of media into live performance environments. The focus is three-fold: Firstly on creating original media, then on integrating original content into different performance genres including complementing scenery, lighting, and performers, and lastly how collaboration influences the previous steps. A basic knowledge of Adobe Photoshop and Adobe After Effects is required. Three lecture hours a week for one semester, with studio hours as required. Prerequisite: Arts and Entertainment Technologies 316 (or 317).

## AET 330. Digital Rendering for Theatre.

Introduction and development of digital rendering techniques primarily used for theater design including the development of scenic and costume renderings, as well as paint elevations, model pieces, renderings indicative of lighting choices, and projections. Emphasis on creating images designed to be shared and used digitally, addressing the challenges of printing color images, and the development of skills in digital painting using Adobe Photoshop. Three lecture hours a week for one semester, with studio hours as required. Prerequisite: Arts and Entertainment Technologies 316 (or 317).

## AET 331. Computer Music Programming I.

Concepts and principals of programming MIDI and audio signals using Max/MSP, MIDI, and audio IO systems, design and organization of Max/MSP programs, algorithms, and techniques to manipulate data and sound. Three lecture hours a week for one semester, with studio hours as required. Arts and Entertainment Technologies 331 and Music 329J may not both be counted. Prerequisite: Arts and Entertainment Technologies 305.

## AET 332. Computer Music Programming II.

Exploration of algorithmic sound processing, signal processing techniques including filters, FFT, convolution, sound analysis/resynthesis using Max/MSP. Three lecture hours a week for one semester, with studio hours as required. Arts and Entertainment Technologies 332 and Music 329M may not both be counted. Prerequisite: Arts and Entertainment Technologies 305.

### AET 335C. Game Design Aesthetics.

Examines different game genres and other playable applications from the viewpoint of design. Three lecture hours a week for one semester. Only one of the following may be counted: Arts and Entertainment Technologies 335, 335C, Fine Arts 310 (Topic: Aesthetics of Game Design), 312. Prerequisite: Arts and Entertainment Technologies 318.

### AET 336. Game History and Theory.

Introduction to critical and historiological approaches to video games and game design, including video game histories and archives, critical media theory in game development and contemporary social issues in gaming. Three lecture hours a week for one semester. Arts and Entertainment Technologies 336 and Fine Arts 310 (Topic: Game History and Critical Theory) may not both be counted.

### AET 337. Writing for Interactive Games.

Exploration of game creation as a multi-threaded narrative story. Students create, write, edit, and refine game stories and game dialogue and build small game scenarios using a variety of game design software platforms. Three lecture hours a week for one semester.

## AET 338. Principles of Interactive Design.

Advanced design in arts and entertainment technologies; principles and theories on interaction and user experience in gaming and mobile media applications. Three lecture hours a week for one semester. Arts and Entertainment Technologies 338 and Arts and Entertainment Technologies 339 (Topic: Principles of Interactive Design) may not both be counted. Prerequisite: Arts and Entertainment Technologies 318.

# AET 139, 239, 339, 439. Advanced Topics in Arts and Entertainment Technologies.

Advanced topics in arts and entertainment technologies. For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit when the topics vary.

## AET 340. Interactive Game and Media Development.

Advanced digital production in arts and entertainment technologies in regards to the development process of gaming and mobile media applications. Three lecture hours a week for one semester. Arts and Entertainment Technologies 339 (Topic: Interactive Media and Game Development) and Arts and Entertainment Technologies 340 may not both be counted. Prerequisite: Arts and Entertainment Technologies 318.

## AET 341. Sound Synthesis and Audio Processing.

Physics and mathematics of audio signal processing, including filter design, reverberation algorithms, direct synthesis technologies, analysis/ synthesis technologies, waveguide systems, compression, and limiting. Three lecture hours a week for one semester, with studio hours as required. Prerequisite: Arts and Entertainment Technologies 305.

## AET 342. Audio-Visual Programming.

Audio and visual synthesis and processing, exploring techniques to synchronize audio and visual data to create unified real-time presentations. Three lecture hours a week for one semester, with studio hours as required.

## AET 344C. 3-D Previsualization.

2-D and 3-D drafting for previsualization solutions. Introduction to the fundamentals and skills of CAD Drafting in Vectorworks, the included Renderworks environment and subsequent integration of 3d files into previsualization software relevant to entertainment professionals. The focus is on skills required to generate and visualize accurate three-dimensional entertainment designs within software environments. Discusses CAD drafting practices, common terms, the 2d/3d workflow and integration of 3d objects in common previsualization environments for entertainment design professionals. Three lecture hours a week for one semester, with studio hours as required. Arts and Entertainment Technologies 314 and 344C may not both be counted. Prerequisite: Arts and Entertainment Technologies 316 (or 317).

### AET 345. Designing Virtual Worlds.

Exploration of architectural concepts and 3-D world building. Students create and model virtual and multi-level worlds from the viewpoint of game play, object, and character movement. Three lecture hours a week for one semester.

### AET 346. Game Scripting and Modding.

Introduction to operations, modifications and coding of game engines. Exploration of "modding" of existing games and scripting of Unity using Java and/or C#. Three lecture hours a week for one semester.

### AET 347. Projection Design.

Introduction to projection design in live performance. Exploration of important work by past and present practitioners though discussion, reading and research. Discusses workflow, methodology and considerations necessary to practically realize a projection design including possible projection system configurations, bespoke imagery, playback systems such as Qlab, Isadora and Watchout as well as projector and screen material options. Basic knowledge of Autocad or Vectorworks is required. Three lecture hours a week for one semester, with studio hours as required. Prerequisite: Arts and Entertainment Technologies 316 (or 317).

## AET 348. Concert and Event Lighting.

Exploration of the styles, tools, and techniques specific to concert and event lighting production in a variety of environments: large-scale music venue, corporate ballroom, outdoor stage and intimate club. Three lecture hours a week for one semester, with studio hours as required. Prerequisite: Arts and Entertainment Technologies 316 (or 317).

### AET 349. Augmented Reality.

Explores the current Augmented Realty (AR) tools and techniques. Investigates AR applications, analyzes and deconstructs various techniques, and examines the skills and tools needed. Also explores other approaches to immersive and experiential designs such as virtual realty, 3-D projection mapping, and stereoscopy. Three lecture hours a week for one semester, with studio hours as required. Prerequisite: Arts and Entertainment Technologies 316 (or 317).

### AET 350. Computer Music Project.

Project in advanced sound processing and synthesis and audio-visual systems. Hours to be arranged. May be repeated for credit.

### AET 351. Live Audio Mixing.

Project in live audio for concerts, performances, theatre, or other productions. Includes setup, engineering, live-capture, and mixing of live productions in the field. Hours to be arranged.

## AET 352. Sound Design Project.

Project developing and creating a complete sound design project for film, video, or games. Hours to be arranged.

### AET 355C. Advanced Game Scripting.

Explores computer and video game script/code through the use of a computer game engine to control gameplay, character behaviors, physics, and world modifications. Reviews the major aspects of coding and creating games within a game engine. Three lecture hours a week for one semester. Arts and Entertainment Technologies 355 and 355C may not both be counted. Prerequisite: Arts and Entertainment Technologies 346.

## AET 356. Technical Art Production.

Production processes to merge game assets and game code and management of these functions within the game production process. Three lecture hours a week for one semester, with studio hours as required. Prerequisite: Consent of instructor.

### AET 360C. Entertainment Systems Design.

Explores how lighting, projectors, and media are controlled over live entertainment networks. Introduces essential hardware and software components and how they communicate with one another to execute a variety of designs. Three lecture hours a week for one semester. Arts and Entertainment Technologies 360 and 360C may not both be counted. Prerequisite: Arts and Entertainment Technologies 316 (or 317).

## AET 361C. Physical Computing.

Introduces concepts and methods of physical computing, including the creation, building, and programming of small devices and the integration of external devices and objects. Three lecture hours a week for one semester. Only one of the following may be counted: Arts and Entertainment Technologies 360, 361, 361C. Prerequisite: Arts and Entertainment Technologies 316 (or 317) and 360C.

### AET 362C. Generative Media and Visuals.

Introduces the foundations of creating and generating real-time visuals for live events. Explores the algorithms essential to generating visuals for electronic dance music, interactive art, music concerts, and dance performances. Utilizing digital and traditional skill-sets to generate and manipulate imagery in real-time using a variety of sensor inputs and control options. Three lecture hours a week for one semester. Arts and Entertainment Technologies 362 and 362C may not both be counted. Prerequisite: Arts and Entertainment Technologies 316 (or 317).

## AET 363C. Visual Programming.

Continued exploration of dynamic, real-time visual computing toward the production of a large final project. Focuses on the inclusion of external device input/output and interaction with MIDI and OSC protocols for applications in interactive performance settings. Three lecture hours a week for one semester. Only one of the following may be counted: Arts and Entertainment Technologies 362, 363, 363C. Prerequisite: Arts and Entertainment Technologies 316 (or 317) and 361C (or 361) or 362C.

## AET 364. Advanced Production Design.

Facilitates collaborative design to realize a large project. Explores the process of working with a team to generate and produce fully realized design packages on a large stage in front of an audience. Hours to be arranged. Prerequisite: Arts and Entertainment Technologies 316 (or 317).

### AET 365. Collaborative Installation Design.

Facilitates collaborative design to realize an installation that combines visual processing, projection, sound, light, human interaction, and live performance. Hours to be arranged. Prerequisite: Arts and Entertainment Technologies 316 (or 317).

## AET 367. The Entrepreneurial Artist.

Same as Fine Arts 369. Exploration of new modes of online and social arts marketing and self promotion. Use of established models to create materials and prototype marketing resources. Three lecture hours a week for one semester. Only one of the following may be counted: Arts and Entertainment Technologies 367, Fine Arts 360 (Topic: The Entrepreneurial Artist), Fine Arts 369.

### AET 368. Internship I.

Internship with an external company or institution, supervised by arts and entertainment technologies faculty. Requires completion of 150 hours of satisfactory on-site work. Hours to be arranged. Prerequisite: Sophomore standing, a University grade point average of at least 2.50, and consent of instructor.

### AET 369. Internship II.

Internship with an external company or institution, supervised by arts and entertainment technologies faculty. Requires completion of 150 hours of satisfactory on-site work. Hours to be arranged. Prerequisite: Sophomore standing, a University grade point average of at least 2.50, and consent of instructor.

### AET 372. Senior Design Projects I.

Creation of a project within a team, with the guidance and advice of faculty members. Industry and faculty members can sponsor these projects. Hours to be arranged. Prerequisite: Upper-division standing.

### AET 373. Senior Design Projects II.

Continuation of a project within a team, with the guidance and advice of faculty members. Industry and faculty members can sponsor these projects. Hours to be arranged. Prerequisite: Upper-division standing.

### AET 374. Independent Study.

Independent study or research in arts and entertainment technologies. Hours to be arranged. May be repeated for credit. Prerequisite: Upperdivision standing, a grade point of average of at least 3.00, consent of instructor, and consent of the director of the Center for Arts and Entertainment Technologies.

## AET 376. Game Capstone: 2-D.

Group project developing a working 2-D game. Hours to be arranged. Prerequisite: Upper-division standing and consent of instructor based on portfolio submission.

## AET 377. Game Capstone: 3-D.

Group project developing a working 3-D game. Hours to be arranged. Prerequisite: Upper-division standing and consent of instructor based on portfolio submission.

## AET 378. Senior Thesis I.

Large scale senior project. Hours to be arranged. Prerequisite: Upperdivision standing and consent of instructor based on thesis proposal.

## AET 379. Senior Thesis II.

Continuation of large scale senior project in Arts and Entertainment Technologies 378. Hours to be arranged. Prerequisite: Upper-division standing and consent of instructor based on thesis proposal.

## **Design: DES**

## **Lower-Division Courses**

## DES 301. Introduction to Design Thinking.

Same as Integrated Design 301D. Introduces design thinking and design methods, with a focus on design process. Three lecture hours a week for one semester. Design 301 and Integrated Design 301D may not both be counted. Offered on the letter-grade basis only.

## DES 102. Technologies in Design Practice.

Introduces a variety of technology and software used by design professionals. The equivalent of one lecture hour a week for one semester. May be repeated for credit when the topics vary.

### DES 303. Introduction to Graphic Design.

Lecture/seminar/studio course. Introduces the fundamental principles, conventions, and techniques of graphic design. Three lecture hours a week for one semester. Offered on the letter-grade basis only.

## DES 308. Introduction to Design Theory and Criticism.

Lecture/seminar course. Introduces design theory and criticism, examining how people's beliefs and values inform the way they make, understand, and evaluate works of design. The equivalent of three lecture hours a week for one semester. Offered on the letter-grade basis only.

## DES 309. Introduction to Design.

Studio course. Introduction to the design process, including research, ideation, prototyping, critique, and iteration. Projects also introduce the vocabulary, principles, strategies, techniques, and conventions of drawing and rendering used by design professionals. Six studio hours a week for one semester. Design 309 and 310 may not both be counted. Offered on the letter-grade basis only. Prerequisite: One of the following: Design 301, Integrated Design 301D, Studio Art 301C, or 302C.

## DES 310. Introduction to Design.

Studio course. Introduction to the design process, including research, ideation, prototyping, critique, and iteration. Six laboratory hours a week for one semester. Design 309 and 310 may not both be counted. Offered on the letter-grade basis only.

## DES 311J. Design Technologies I.

Studio course. Projects introduce the vocabulary, principles, strategies, techniques, and conventions of color, composition, rendering,

photography, and typography used by design professionals. Six laboratory hours a week for one semester. Offered on the letter-grade basis only.

## DES 311K. Design Technologies II.

Studio course. Projects introduce techniques and theories for designing time-based and interactive experiences, including video, motion graphics, and web/mobile applications. Six laboratory hours a week for one semester. Offered on the letter-grade basis only.

## DES 312. Visual Syntax in Communication.

Introduction to fundamental typographic elements: visual composition and form-making, sequence and narrative, and contrast and hierarchy. Final project is a portfolio to be submitted for sophomore performance review. Six laboratory hours a week for one semester. Only one of the following may be counted: Design 312, 312G, 325. Offered on the lettergrade basis only.

## DES 312G. Typography in Communication.

Studio course. Introduction to fundamental typographic elements: visual composition and form-making; sequence and narrative; and contrast and hierarchy. Six laboratory hours a week for one semester. Only one of the following may be counted: Design 312, 312G, 325. Offered on the letter-grade basis only.

## DES 313. Introduction to Design History.

Lecture/seminar course. Lectures, readings, discussions, and assignments introduce the history of graphic and/or industrial design. Three lecture hours a week for one semester. Design 313 and 336 may not both be counted. Offered on the letter-grade basis only.

## DES 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Design.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad office. Credit is recorded as assigned by the Design Assistant Chair of the Department of Art and Art History. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

## **Upper-Division Courses**

### DES 320. Design Theories and Methods.

Lecture/seminar/studio course. Introduces cultural and aesthetic theories pertinent to design, as well as research methods for generating and prototyping ideas. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Design 309.

## DES 321. Images in Communication.

Studio course. Explores the selection and creation of images appropriate to specific communication goals and contexts, such as promotional images, infographics, logos, instructions, and/or narratives. Six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Studio Art 301C, 302C, and 303C; or Design 308 or Art History 304; and credit or registration for Design 309.

### DES 322. Design and the Social Environment.

Studio course. Involves researching a contemporary social issue; define an area of opportunity; and design graphics, objects, services, and/or systems that respond ethically to the issue. Six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Design 309. Design 321, 325, and 326 are recommended.

## DES 324. Design Research and Methods.

Lecture/studio course. Lectures and projects introduce problem-framing and problem-solving techniques and a variety of design research, ideation, prototyping, and iterative methods. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: One of the following: Design 301, 309, or Integrated Design 301D.

## DES 325. Typography I.

Studio course. Projects introduce the fundamental principles, conventions, and techniques of typography. Six laboratory hours a week for one semester. Only one of the following may be counted: Design 312, 312G, 325. Offered on the letter-grade basis only. Prerequisite: Studio Art 301C, 302C, and 303C; or Design 308 or Art History 304; and credit or registration for Design 309.

### DES 326. Objects and Spaces.

Studio course. Projects introduce rendering and prototyping techniques used for solving problems in three-dimensional media such as product design, packaging design, environmental graphics, and/or architectural/landscape design. Six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Studio Art 301C, 302C, and 303C; or Design 308 or Art History 304; and credit or registration for Design 309.

# DES 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Design.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad office. Credit is recorded as assigned by the Design Assistant Chair of the Department of Art and Art History. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### DES 334. Introduction to Interaction Design.

Studio course. Projects introduce theories, methods, and techniques for designing time-based and interactive experiences, including video, motion graphics, and web/mobile applications. Six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: The following with a grade of at least C: Design 309, 321, 325, and 326.

## DES 335. Typography II.

Studio course. Students use typographic principles to design complex print and on-screen publications. Six studio hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Credit with a grade of at least C for Design 309, 321, 325, and 326.

### DES 336. History of Design.

Lecture/seminar course. Surveys the history of graphic and/or industrial design from c.1450 to the present, with an emphasis on the last 150 years. Three lecture hours a week for one semester. Design 313 and 336 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Art History 303.

### DES 337. Topics in Design History.

Lectures and discussions focusing on specialized or advanced topics in the history of design. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: Design 313 or 336 with a grade of at least C.

**Topic 1: History of Graphic Design.** Surveys the history of graphic design from 1450 to the present, with an emphasis on the last 150 years. Offered on the letter-grade basis only.

**Topic 2: History of Industrial Design.** Surveys the history of industrial design from 1750 to the present, with an emphasis on the last 150 years. Offered on the letter-grade basis only.

**Topic 3: Research Methods in Design History.** Introduces a variety of research methods in design history. Offered on the letter-grade basis only.

## DES 340. Design Systems.

Development of flexible, integrated design systems such as identities, wayfinding, and service design. Six laboratory hours a week for one semester. Design 340 and 340G may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit with a grade of at least C in each or registration for Design 326, 334, and 335, and credit or registration for Design 336.

## DES 340G. Branding and Visual Identity Systems.

Studio course. Explores the purposes and constraints of branding and visual identity design, and creative systems that can be applied consistently across media and materials. Six laboratory hours a week for one semester. Design 340 and 340G may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit with a grade of at least C in each or registration for Design 326, 334, and 335, and credit or registration for Design 336.

## DES 341. Advanced Issues in Visual Syntax.

Exploration of advanced issues in typography. Six laboratory hours a week for one semester. Design 341 and 341G may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit with a grade of at least C in each or registration for Design 326, 334, and 335, and credit or registration for Design 336.

## DES 341G. Typography III.

Studio course. Advanced projects in typography; introduction to type design, material explorations, environmental type design, and expressive distortion Six laboratory hours a week for one semester. Design 341 and 341G may not both be counted. Offered on the letter-grade basis only. Prerequisite: Design 335 with a grade of at least C.

## DES 342. Design and Persuasion.

Development and presentation of coherent informational and persuasive visual statements. Six laboratory hours a week for one semester. Design 342 and 342G may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit with a grade of at least C in each or registration for Design 326, 334, and 335, and credit or registration for Design 336.

### DES 342G. Information and Persuasion.

Studio course. Explores ways to communicate information accurately, clearly, and persuasively through informational graphics and data visualization. Six laboratory hours a week for one semester Design 342 and 342G may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit with a grade of at least C in each or registration for Design 326, 334, and 335, and credit or registration for Design 336.

### DES 343. Design Research and Methods II.

Studio course. Students use insights gleaned from comparison research, user testing, and/or product reviews to refine existing prototypes or products. Six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Credit with a grade of at least C in each or registration for Design 326, 334, and 335, and credit or registration for Design 336.

### DES 344. Objects and Spaces II.

Studio course. Advanced practice in problem-solving, rendering, and prototyping in three-dimensional media, such as product design, packaging design, environmental graphics, and architectural/landscape design. Six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Credit with a grade of at least C in each or registration for Design 326, 334, and 335, and credit or registration for Design 336.

## DES 345. Design Writing.

Lecture/seminar course. Students propose and carry out original research and writing projects with the aim of submitting their writing for publication. Three lecture hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: Credit with a grade of at least C in each or registration for Design 326, 334, and 335, and credit or registration for Design 336.

## DES 346. Project Studio.

Studio course. Professional experience solving real-world problems, including commissioned projects, student-initiated projects, and/or pro bono projects. Six laboratory hours a week for one semester. May be taken three times for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: Consent of instructor.

## DES 347. Publication Studio.

Studio course. Advanced publishing projects in print and/or digital media. Six laboratory hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: For design majors, credit or registration for Design 309; for others, consent of instructor.

## DES 348. Information Visualization.

Studio course. Students devise ways to communicate information accurately, clearly, and memorably. Six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Credit with a grade of at least C in each or registration for Design 326, 334, and 335 and credit or registration for Design 336.

### DES 349. Interaction Design II.

Lecture/studio course. Students design visually pleasing, responsive, user-centered web and mobile interfaces. One lecture and three studio hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Design 334 with a grade of at least C.

## DES 350. Special Topics in Design.

Studio course. Projects focusing on contemporary design practice, featuring approaches and subfields not represented elsewhere in the curriculum. Six laboratory hours a week for one semester. May be repeated twice for credit, but not with the same instructor in the same semester. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

### **DES 351. Design Perspectives.**

Studio course. Workshops and projects led by industry professionals, visiting lecturers, and/or University faculty and graduate students, featuring design approaches, subfields, practices, and media. Two lecture and two laboratory hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: Credit with a grade of at least C in each or registration for Design 326, 334, and 335, and credit or registration for Design 336.

### DES 352. Service and Systems Design.

Studio course. Students design effective user-centered systems and services. One lecture and three studio hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Credit with a grade of

at least C in each or registration for Design 326, 334, and 335, and credit or registration for Design 336.

## DES 353. Advanced Topics in Interaction Design.

Studio Course. Students undertake advanced projects in interaction design. Topics may include user research, user interface design, service design, usability, and accessibility. The equivalent of three lecture hours a week for one semester. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: Design 334 or 349, with a grade of at least C; or consent of instructor.

## DES 354. Design Issues.

Lecture/seminar course. Students engage with contemporary issues in design through reading, discussion, and writing. Three lecture hours a week for one semester. May be taken twice for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: Credit with a grade of at least C in each or registration for Design 326, 334, and 335, and credit or registration for Design 336.

## DES 355. Interaction Design III.

Studio course. Advanced projects in visually pleasing, responsive, usercentered web and mobile interfaces. Six studio hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Design 334 and 349 with a grade of at least C in each.

## DES 359. Professional Practices in Design.

Lecture/studio course. Lectures introduce professional practices in design, intellectual property issues, contracts, pricing, accounting, tax preparation, business plans, promotion, etc. One lecture and three studio hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Credit with a grade of at least C in each or registration for Design 326, 334, and 335, and credit or registration for Design 336.

## DES 360. Design Internship.

Restricted to design majors. Introduces students to ethical standards and professional practices in design; requires completion of an approved professional internship. Three lecture hours a week for one semester. Design 360 and 371 may not both be counted. Offered on the letter-grade basis only. Prerequisite: The following with a grade of at least C in each: Design 326, 334, and 336.

### DES 370. Senior Project in Design.

Restricted to design majors. Studio course. Students define their own research problem and propose appropriate design solutions, guided by feedback from desk critiques with the instructor, group critiques, and reviews with a visiting critic. Six laboratory hours a week for one semester. Design 370 and 374 may not both be counted. Offered on the letter-grade basis only. Prerequisite: At least 90 hours of coursework and consent of design assistant chair.

### DES 371. Design Practicum.

Restricted to design majors. Lecture/internship course. Resume and portfolio preparation; discussion of professional ethics and responsibilities; professional internship. For each semester hour or credit earned, the equivalent of one lecture hour a week for one semester. Design 360 and 371 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Consent of instructor and consent of design assistant chair.

## DES 374. Capstone Design Project.

Restricted to design majors. Studio course. Students define their own research problem and propose appropriate design solutions, guided by feedback from desk critiques with the instructor, group critiques, and reviews with a visiting critic. Six laboratory hours a week for one semester. Design 370 and 374 may not both be counted. Offered on the

letter-grade basis only. Prerequisite: Senior standing, and credit with a grade of at least C in each or registration for Design 309, 321, 325, 326, 334, and 336.

## DES 375. Capstone Design Exhibition.

Restricted to design majors. Studio course. Students collaboratively curate, design, and install a senior BFA exhibition, and publish collateral materials that publicly showcase their capstone projects. Six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Design 370 or 374 with a grade of at least C and consent of the design assistant chair.

## DES 376. Independent Study: Design.

Student-defined projects completed under faculty supervision. The equivalent of six laboratory hours a week for one semester. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: Consent of instructor and consent of design assistant chair.

## **Integrated Design: ITD**

## **Lower-Division Courses**

## ITD 101. Introduction to Integrated Design.

Introduction to the concept of Design Thinking as a core fundamental in education and industry across all disciplines and channels. Guest speakers may facilitate discussion of various innovation issues facing businesses today. The equivalent of one lecture hour a week for one semester.

## ITD 301D. Introduction to Design Thinking.

Same as Design 301. Introduces design thinking and design methods, with a focus on design process. Three lecture hours a week for one semester. Design 301 and Integrated Design 301D may not both be counted. Offered on the letter-grade basis only.

## ITD 102. Sketching for Thinking and Communication.

Discussion of sketching as the fastest way to convey ideas, both in an ideation session or taking notes in a meeting. Explores the basic elements of sketching to visualize concepts and quickly bring alignment to any team. The equivalent of one lecture hour a week for one semester.

### ITD 103. Portfolio Critique.

Development of a portfolio of work to present for feedback. Designed to help students understand what is expected to create a personal portfolio to show potential employers. The equivalent of one lecture hour a week for one semester.

### ITD 104. Design in Business.

Introduction to the role that business plays in the design industry. Designed to help students learn business principles to enhance problem solving skills. The equivalent of one lecture hour a week for one semester.

### ITD 105. Introduction to Computer Science Principles.

Restricted to non-computer science majors. Introduction to the basic principles and terms of logic, programming and computer science for non-computer science majors. The equivalent of one lecture hour a week for one semester.

# ITD 106. Presentation and Improvisational Skills in Design Thinking.

Focus on presentation skills and improvisational/impromptu speaking skills in meetings. The equivalent of one lecture hour a week for one semester.

## ITD 107. Introduction to Desktop Publishing Software.

Introduction to elements of desktop publishing software. Explores basic skills in computer applications such as Adobe InDesign. The equivalent of one lecture hour a week for one semester.

## ITD 108. Introduction to Graphic Editing Software.

Introduction to elements of graphic editing software. Focus on basic skills in computer applications such as Adobe Photoshop. The equivalent of one lecture hour a week for one semester.

## ITD 109. Introduction to Vector Graphics Software.

Introduction to elements of vector graphic software. Focus on basic skills in computer applications such as Adobe Illustrator. The equivalent of one lecture hour a week for one semester.

## ITD 110, 210, 310. Topics in Integrated Design.

Studies within integrated design. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May be repeated for credit when the topics vary.

### ITD 111. Intro to Design for Artificial Intelligence.

Introduction to exploring design as a problem-solving tool for realworld scenarios posed from artificial intelligence and robotics. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. Offered on the letter-grade basis only.

## ITD 312. Introduction to Design for Health.

Introduction to how design is playing a role in the changing healthcare industry. Three lecture hours a week for one semester. Prerequisite: The following coursework with a grade of at least C in each: Integrated Design 101, and Design 301 or Integrated Design 301D.

## ITD 115. Creative Entrepreneurship.

Exploration of the integration of entrepreneurship in industry and introduction to the creative process of starting new ventures. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. Offered on the letter-grade basis only.

## **Upper-Division Courses**

### ITD 320. Advanced Design for Artificial Intelligence.

Advanced exploration of real-world scenarios posed from artificial intelligence and robotics. In-depth study of designing and solving problems for artificial intelligence. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upperdivision standing; Integrated Design 301D and Integrated Design 111 or Integrated Design 110.

### ITD 125, 225, 325. Topics in Artificial Intelligence Design.

Studies within design and artificial intelligence. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: Upper-division standing; Integrated Design 301D; and Integrated Design 111 or 320.

### ITD 150, 250, 350. Advanced Topics in Integrated Design.

Advanced studies in integrated design. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

### ITD 350D. Business of Design.

Designed to help students form an advanced understanding of the role that business plays in the design industry and the operational components necessary to be successful in the design industry. Three

lecture hours a week for one semester. Prerequisite: Upper-division standing and the following with a grade of at least C in each: Integrated Design 101, 304, and Design 301 or Integrated Design 301D.

## ITD 365. Applied Ethnographic Research in Design.

Focus on how to create actionable insights using ethnographic research. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and the following with a grade of at least C in each: Integrated Design 101, and Design 301 or Integrated Design 301D.

## ITD 170, 270, 370. Topics in Off-Site Field Studios.

Project-based work with off-campus industry studio partners. Professional experience solving real-world problems including, but not limited to, commissioned projects, student-initiated projects, and pro bono projects. For 170, two laboratory hours a week for one semester; for 270, four laboratory hours a week for one semester; for 370, six laboratory hours a week for one semester. Additional hours to be arranged as needed. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: For College of Fine Arts majors, upper-division standing and six semester hours of upperdivision coursework in design or integrated design; for non-College of Fine Arts majors, upper-division standing and consent of instructor.

## ITD 375. Capstone in Integrated Design.

Restricted to students in the bridging discipline program. Multidisciplinary groups of students research an integrated design problem and propose and prototype an appropriate solution, guided by feedback from supervising instructor(s). Six laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upper-division standing, Integrated Design 101, Integrated Design 301D, three additional one-credit Integrated Design Courses, and consent of instructor.

# John A. and Katherine G. Jackson School of Geosciences

Sharon Mosher, PhD, Dean Chris Bell, PhD, Associate Dean, Academic Affairs David Mohrig, PhD, Associate Dean, Research http://www.jsg.utexas.edu/

## **General Information**

## Mission

As civilization enters an era of increasing challenge, it is imperative that leaders, professionals, and citizens be well educated, competently and realistically able to address issues of local to global scope. With regard to the origin, history, structure, and processes of the planet Earth, and the use and management of its resources, the John A. and Katherine G. Jackson School of Geosciences aims to provide such an education. The objective of every natural science, including geological sciences, is to understand the realm of physical nature. Geological sciences, or geosciences, is a synthetic subject that examines the Earth through such traditional subdisciplines as geophysics, hydrogeology, paleontology, petrology, stratigraphy, and structural geology. Geoscientists also draw upon discoveries from mathematics, geography, archaeology, engineering, and the other sciences to meld an approach that is interdisciplinary, yet uniquely geological.

The need for well-educated geoscientists in industry, government, and education promises a bright future for geoscience professionals in the coming decades. As the human population expands, it is essential to develop sufficient resources and to maintain a livable environment. Geoscientists understand the dynamics of the Earth and its systems —the occurrence of natural resources and the diverse time scales of natural and human-induced change.

Every university seeks to enrich the education of its student body generally. Study of geosciences enhances a liberal arts or arts and sciences education. Geosciences uses experiments and observations to explore origins and processes, whether of the Earth itself, of geologic phenomena, or of the history of life. It operates in the conventional three dimensions of space and in the fourth dimension of deep geologic time. Both in the laboratory and in the field, it examines the Earth on all scales, from atomic nuclei, to a hand sample of rock, to an entire landscape, to continents and oceans, to the planet as a whole.

## Vision

The Jackson School of Geosciences (http://www.jsg.utexas.edu) at The University of Texas at Austin is among the most established and well-regarded geosciences programs in the world. The school includes the University's Department of Geological Sciences (http:// www.jsg.utexas.edu/dgs), one of the country's oldest geological sciences departments, and two world-renowned research units, the Institute for Geophysics (http://www.ig.utexas.edu) and the Bureau of Economic Geology (http://www.beg.utexas.edu). The school is home to the world's largest academic geosciences community of alumni, research scientists, and faculty members as well as one of the largest combined graduate and undergraduate enrollments of any major geoscience program.

The Jackson School is both old and new. It traces its origins to the Department of Geology founded in 1888 but became a separate unit

at the level of a college on September 1, 2005. The school's formation resulted from one of the most generous gifts in the history of higher education when the late John A. and Katherine G. Jackson bequeathed endowments and assets toward "the subjects of geology; geophysics; energy, mineral and water resources; as well as the broad areas of the earth sciences, including the Earth's environment." The charge of their gift and the responsibilities that come with it are reflected in the school's vision:

To become the preeminent geosciences program in the country with international prominence in geology, geophysics, energy, mineral and water resources, and in the broad areas of the earth sciences, including the Earth's environment. To realize this vision, the Jackson School will pursue initiatives that:

- Place the school at the forefront of research.
- Place the school at the forefront of education, student services, and student opportunities.
- · Create the fabric of a great college.
- · Increase competitiveness for top talent.

# Financial Assistance Available through the School

Through the Geology Foundation, the Jackson School of Geosciences (JSG) is able to provide financial assistance to its students through funds established by individuals, foundations, and industrial or research organizations. Scholarships are currently awarded on the basis of academic standing and performance including, but not limited to, grade point average, progress towards degree, and hours completed. Additional scholarship opportunities that may be available while enrolled in the Jackson School include recruitment scholarships, academic support scholarships and field course financial assistance. All students may also seek financial assistance through the University's Office of Financial Aid. Additional information for all of the JSG Financial Assistance (http://www.jsg.utexas.edu/education/undergraduate/ financial-aid) programs is available online.

## **Student Services**

The mission of the Jackson School of Geosciences Student Services Office is to facilitate students' development and advancement in the Jackson School community and beyond. Services provided to all Jackson School majors and non-majors such as professional academic advising and career counseling are available to students year-round.

## Academic Advising

The JSG Academic Advising office, located in the Holland Family Student Center serves the undergraduate students of the Jackson School by offering academic advising and guidance. Each undergraduate student is expected to meet with a JSG academic adviser at least once per semester to review his/her academic progress and prepare to register for the next semester. Information related to JSG academic programs and opportunities is frequently distributed to students via email which is considered an official form of communication by the University. Students are responsible for reading this information and taking the necessary actions in a timely manner. JSG Student Services staff is available to meet with students throughout the year to address any issues or questions they may have.

## **Counseling and Referral Services**

The Jackson School of Geosciences Student Services office advises and counsels students about problems or concerns they have about their

academic work or life in the school. In addition, University counseling services are available from the Counseling and Mental Health Center (http://cmhc.utexas.edu), the Telephone Counseling Service, the Sanger Learning Center (http://www.utexas.edu/ugs/slc), and University Health Services (http://healthyhorns.utexas.edu). These offices are described in *General Information*.

## **Career Services**

The Jackson School of Geosciences (JSG) Career Services Office, located in the Holland Family Student Center, serves the undergraduate and graduate students of the Jackson School by offering career development workshops, job search resources, and opportunities to network with alumni, recruiters and members of industry.

The JSG Career Services Office assists Jackson School students in researching, preparing for and identifying opportunities for full-time or part-time jobs and internships. The staff posts job opportunities throughout the year and hosts company information sessions as well as on-campus interviews with recruiters each fall and spring. The Jackson School of Geosciences Career Fair, which brings students and employers together every fall, provides another forum for geosciences students to learn about different career opportunities.

Career services for students who plan to teach are provided by Education Career Services in the College of Education and by UTeach-Natural Sciences. See Preparation for Teacher Certification (p. 16) for additional information.

# **Admission and Registration**

## Admission

Admission and readmission of undergraduate students to the University is the responsibility of the director of admissions. All students who wish to major in geological sciences must be admitted to the University according to the procedures given in *General Information* (http://catalog.utexas.edu/general-information/admission/undergraduate-admission).

Students admitted to the University with deficiencies in high school units must remove the deficiencies as prescribed in *General Information* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/the-texas-success-initiative).

Admission to the Jackson School is granted for the fall semester only. All freshmen and external transfer students are expected to attend New Student Orientation the summer before they enter the school.

# Admission to the Geological Sciences Program

## **Freshman Admission**

Freshman applicants seeking admission to the Jackson School must meet the calculus readiness requirement by the official admissions application deadline. More information about the calculus readiness requirement is available through the University Admissions Office or online (http://admissions.utexas.edu).

Applicants to the Jackson School of Geosciences must use the ApplyTexas (http://www.applytexas.org) online application and select geological sciences, entry-level as a first-choice major. When selecting a second-choice major, freshman applicants may choose from one of the many other majors offered at the University. Those students interested in applying to the environmental science or geosystems engineering and hydrogeology degree programs should refer to the information provided below.

## **External Transfer Admission**

Students who wish to transfer to the University from another college or university must apply to the Office of Admissions as described in *General Information* (http://catalog.utexas.edu/general-information/admission/ undergraduate-admission/#transferadmissiontext). External transfer applicants seeking admission to the Jackson School of Geosciences must demonstrate calculus readiness by the official admissions application deadline. Details regarding transfer calculus readiness are available through the University admissions office or online (http:// admissions.utexas.edu). External transfer applicants to the Jackson School must use the ApplyTexas (http://www.applytexas.org) online application and select geological sciences, entry-level as a first-choice major.

Only courses listed in the student's geosciences degree program, or equivalent courses approved by the Associate Dean for Academic Affairs, may be counted toward a geosciences degree. A course may therefore be accepted for transfer credit but not be applicable toward a geosciences degree. Prospective students are encouraged to consult the geological sciences degree plans and transfer course equivalency information available online.

## Internal Transfer Admission

Students enrolled in another college or school at the University may apply in early spring to be considered for admission to the Jackson School of Geosciences the following fall semester. A cumulative inresidence grade point average of 3.0 or higher is generally necessary to be competitive for admission. The following minimum requirements for consideration are in addition to the requirements to transfer from one division to another given in *General Information* (http:// catalog.utexas.edu/general-information/registration-tuition-and-fees/ transfer-from-one-division-to-another-within-the-university).

- 1. Completion of at least 24 semester hours of coursework in residence at the University. Credit by exam and correspondence, extension and transfer hours may not be counted toward this requirement.
- 2. Completion of, or enrollment in, the following courses or their equivalent at the time of application. A grade of *C* or higher required in completed courses to fulfill this requirement.
  - For students with less than 30 semester hours of coursework in residence at the University at the completion of the spring semester in which they apply; Mathematics 408C or 408K and 408L. For students with 30 hours or more: Mathematics 408D or 408M.
  - · Geological Sciences 401 or 303.
  - Chemistry 301.

Additional information for all internal transfer applicants:

- · Only currently enrolled students may apply.
- Students may apply during the semester they are completing the minimum requirements to be eligible for consideration.
- Interested students are encouraged to attend a Jackson School internal transfer information session prior to the spring they intend to submit an application for internal transfer. A schedule of information sessions as well as additional information about the application process, online application, and submission deadlines are available on the Jackson School undergraduate website (http:// www.jsg.utexas.edu/education/undergraduate/internal-transfers).

# Internal Transfer within the Jackson School

A geological sciences student interested in transferring to a different degree program within the Jackson School must submit an application in early spring for admission review. Students must meet the same minimum requirements as students applying to transfer from another division of the University to be eligible for consideration.

Students in the BS Geosystems Engineering and Hydrogeology and BS Environmental Science degree programs may have an active student status in more than one college or school over the course of their degree program. These arrangements are in place to provide students access to required courses not offered in their primary college or school. The Cockrell School of Engineering is the primary school for the GEH degree and the College of Liberal Arts, College of Natural Sciences, or Jackson School for the EVS degree. Therefore, students in these degree programs interested in transferring to a geological sciences degree program in the Jackson School must submit an internal transfer application for consideration as outlined in this section.

## Admission to the Geosystems Engineering and Hydrogeology Program

The Bachelor of Science in Geosystems Engineering and Hydrogeology (GEH) is offered jointly by the Cockrell School of Engineering and the Jackson School of Geosciences. Students are simultaneously registered in both schools once accepted.

## **Freshmen Admission**

Freshmen applicants seeking admission to the GEH degree program are admitted through the Jackson School of Geosciences. Applicants must meet the calculus readiness requirement by the official admissions application deadline. More information about calculus readiness is available through the University admissions office or online (http:// bealonghorn.utexas.edu).

Applicants to the GEH program should use the ApplyTexas (http:// www.applytexas.org) online application and select geosystems engineering and hydrogeology as a first-choice major. When selecting a second-choice major, freshman applicants may choose from one of the many other majors offered at the University.

## **External Transfer Admission**

Students who wish to transfer to the University from another college or university must apply to the Office of Admissions as described in *General Information* (http://catalog.utexas.edu/general-information/admission/ undergraduate-admission/#transferadmissiontext). External transfer applicants are admitted through the Cockrell School of Engineering and should use the ApplyTexas (http://www.applytexas.org) online application and select geosystems engineering and hydrogeology as a first-choice major. Requirements for admission as a transfer student vary, but all transfer applicants must submit transcripts of all college and high school coursework.

External transfer applicants will be required to meet the following minimum criteria to be considered for admission to the geosystems engineering and hydrogeology major.

- Completion of Mathematics 408L, 408M, or 408D,
- Completion of Physics 303K and 103M,
- Completion of a minimum of four technical courses. Technical courses include courses offered in mathematics, physics, chemistry, biology, geology, computer science, and engineering.

Admission applications that are not complete by the March 1st deadline may be held to a higher admissions standard than those that are complete, if enrollment limits are reached.

## **Internal Transfer Admissions**

Students interested in transferring to the GEH program from another division of the University must apply through the Cockrell School of Engineering. Please refer to *General Information* (http:// catalog.utexas.edu/general-information/registration-tuition-and-fees/ transfer-from-one-division-to-another-within-the-university) as well as the Cockrell School of Engineering portion of the Undergraduate Catalog for minimum requirements, application deadlines, and other information regarding internal transfer admissions for the geosystems engineering and hydrogeology degree program.

## Registration

General Information (http://catalog.utexas.edu/general-information/ registration-tuition-and-fees) gives information about registration, adding and dropping courses, transferring from one division of the University to another, and auditing a course. The *Course Schedule* (http:// registrar.utexas.edu/schedules), published before registration each semester and summer session, contains registration instructions, advising locations, and the times, places, and instructors of classes. The *Course Schedule* (https://registrar.utexas.edu/schedules) and *General Information* (http://catalog.utexas.edu/general-information) are published on the registrar's website (http://registrar.utexas.edu).

## Academic Policies and Procedures

## **Mathematics Placement**

Mathematics, in the form of calculus or statistics, is required for all geological sciences degrees. To enroll in a calculus or statistics course in the college, students must first take the mathematics placement exam. All incoming Jackson School students are required to complete this placement exam before the start of fall classes, preferably during summer orientation.

## **Minimum Scholastic Requirements**

The student must earn a cumulative grade point average of at least 2.00 in all courses taken at The University of Texas at Austin (including credit by examination, correspondence, and extension) for which a grade or symbol other than *Q*, *W*, *X*, or *CR* is recorded. In addition, the student must earn a grade point average of at least 2.00 in geological sciences courses taken at the University and counted toward the major requirement. The student must earn a grade of at least *C*- in each course used to fulfill any of the requirements for the degree. For more information about grades and the grade point average, see *General Information* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/computation-of-the-grade-point-average).

## Academic Probation and Dismissal

Students are expected to make continuous progress toward the degree while maintaining the University minimum scholastic requirements. A student is placed on academic probation if his or her grade point average falls below 2.00. University regulations on scholastic probation and dismissal are given in *General Information* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/computation-of-the-grade-point-average).

Students on academic probation are expected to focus on academic improvement and thus are not allowed to hold student offices (elected

or appointed) or to receive college stipends for travel to professional meetings or other college-sponsored events.

Students in the Bachelor of Science in Geosystems Engineering and Hydrogeology (GEH) degree program must maintain the scholastic requirements of the Cockrell School of Engineering. Although GEH students have an active student status in the Jackson School, they are subject to the academic policies and procedures of the Cockrell School of Engineering.

## **Repetition of a Course**

A student may not enroll in any course in the Jackson School more than twice, even if the course is needed to meet degree requirements, without first obtaining written consent from the Associate Dean for Academic Affairs. The symbol *Q* or *W* counts as an enrollment unless it has been approved by the Associate Dean for Academic Affairs as nonacademic.

A student who is denied approval to repeat a course in residence at the University will also be denied approval to complete the course by transfer, extension, correspondence, distance education, or credit by examination and then count it towards the degree.

## **Concurrent Enrollment**

Concurrent enrollment is enrollment simultaneously at the University and at another educational institution or in any combination of correspondence, extension and online or distance education courses. During a long semester students enrolled in the Jackson School of Geosciences are not allowed to take courses at another school or institution or by correspondence or extension at the University unless approved in advance by the Associate Dean for Academic Affairs.

A student in his or her final semester may not enroll concurrently at another institution in any course, including a distance education course, to be counted toward the degree. In the final semester, the student may also not enroll by extension or correspondence in coursework to be counted toward the degree. All transfer, extension, and correspondence coursework must be added to the student's official record before his or her last semester.

## **Undergraduates in a Graduate Course**

The Jackson School encourages undergraduates who excel academically and would benefit from further challenges to enroll in graduate courses. With permission, undergraduates may count graduate courses toward their undergraduate degrees or may reserve them for graduate credit. To enroll in a graduate course, undergraduates must meet the University's eligibility requirements and must receive permission from the course instructor, the graduate adviser for the offering department, and the dean's office. Undergraduates reserving courses for graduate credit must also receive permission from the graduate dean. More information is available in the section Coursework in the Graduate School and the School of Law (p. 18).

## **Petitions for Degree Requirements**

Petitions for exceptions to degree requirements, with the exception of the University-wide Core Curriculum, are handled through the JSG Student Services Office. After meeting with the student, an academic adviser initiates the petition on the student's behalf and routes it to the appropriate faculty. The most common reason for petitioning is to request the substitution of transfer coursework for a specific degree requirement. Final decisions on all petitions are made by the Jackson School dean's office.

## Attendance

Jackson School students are expected to attend all meetings of the classes for which they are registered. Students who fail to attend class regularly are inviting scholastic difficulty. In some courses, instructors may have attendance requirements; these should be made known to students during the first week of classes. With the approval of the dean, a student may be dropped from a course with a grade of *F* for repeated unexcused absences.

## **Portable Computing Devices**

Students entering the geological sciences major are encouraged to have access to a portable computing device as individual courses may require the device for certain lectures and/or labs.

## Honors

## **University Honors**

Each fall and spring semester, undergraduate who complete a full course load and earn outstanding grades, are recognized on the fall or spring University Honors list, respectively. Students are notified on the semester grade report of their inclusion on the list. The Jackson School hosts an event each spring to recognize JSG University Honors students in conjunction with University-wide Honors Day.

Additional information on University Honors is available in *General Information* (http://catalog.utexas.edu/general-information/academicpolicies-and-procedures/computation-of-the-grade-point-average).

## **School Honors Program**

The Jackson School offers a departmental honors program to its majors. Students who wish to participate in the program should submit an application to the JSG Student Services Office when they have completed 60 semester hours of coursework, including at least 12 semester hours of upper-division coursework in geological sciences. The Jackson School of Geosciences Honors Program receives an increasing number of qualified applications each year and not all applicants are guaranteed acceptance.

Minimum requirements for the completion of this program are:

- 1. A cumulative University grade point average of at least 3.00, and a grade point average in geological sciences of at least 3.50,
- 2. Geological Sciences 171H, 172H, and 173H with a grade of at least *B*-in each,
- 3. Geological Sciences 379H, with a grade of at least B-,
- 4. Completion at the University of at least 60 semester hours of coursework counted toward the degree.

An honors student who completes all program requirements will receive the designation "Special Honors in Geological Sciences" on his or her transcript and be recognized at the Jackson School commencement ceremony.

## Graduation

## **Special Requirements of the School**

All students must fulfill the general requirements (p. 20) for graduation. Students in the Jackson School must also fulfill the following requirements:

- All University students must have a grade point average of at least 2.00 to graduate. Jackson School students must also have a grade point average in geological science courses of at least 2.00. Students in the Geological Sciences Departmental Honors Program must have a University grade point average of at least 3.00 and a grade point average in geological science courses of at least 3.50.
- 2. The University requires that the student complete in residence at least 60 semester hours of the coursework counted toward the degree. For the Bachelor of Arts in Geological Sciences, these 60 hours must include at least 18 hours in geological sciences.
- 3. The University requires that at least six semester hours of advanced coursework in the major be completed in residence. Options I, II, and III of the Bachelor of Science in Geological Sciences require at least 18 hours of upper-division coursework in geological sciences be completed in residence; Option V requires at least 12 hours. (Option IV: Environmental Science and Sustainability is no longer offered.)

## **Degree Audit**

Each student should view their personal electronic degree audit available each semester through IDA, the University's Interactive Degree Audit (http://registrar.utexas.edu/students/degrees/ida) system. The degree audit tells the student the courses he or she must take and the requirements he or she must fulfill to receive the degree. Although the degree audit normally provides an accurate statement of requirements, the student is responsible for knowing and meeting the requirements of the degree as stated in the undergraduate catalog under which he or she is eligible to graduate; (refer to the rules on graduation under a particular catalog in *General Information* (p. 21)). Since the student is responsible for correct registration toward completion of the degree program, he or she should consult with a JSG academic adviser before registering if in doubt about any requirement.

## **Final Degree Audit**

Prior to registering for the last semester of their Jackson School degree program each student must meet with a JSG academic adviser to review their final degree audit. It is the student's responsibility to complete all procedures associated with the final degree audit in a timely manner.

Any student who does not graduate when eligible must promptly contact the JSG Student Services Office. An academic adviser will advise the student what steps are needed for future registration and graduation.

## **Applying for Graduation**

Students must be registered at the University and must file a graduation application form with the JSG Student Services Office the first semester they are eligible to graduate. A student is considered eligible to graduate if he or she can complete all degree requirements by registering for 12 semester hours or fewer. Graduation applications should be submitted as early as possible, preferably during the first week of classes. Failure to adhere to these procedures and deadlines will jeopardize the student's potential graduation as well as future registration in the Jackson School.

## Commencement

The Jackson School of Geosciences graduation ceremony is held each spring in conjunction with the University-wide commencement ceremony. Students who complete their degree requirements in the fall or summer are invited to participate in the school's spring ceremony. Students graduating with University Honors, School Honors and Jackson Scholars are recognized at the school's ceremony.

Summer degree candidates who have completed a final degree audit may participate in the spring Jackson School commencement ceremony preceding their official graduation date. In addition to completing a final degree audit, students must submit an application to walk in the ceremony by the published deadlines. Neither the application to walk nor participation in any commencement events constitute applying to graduate or official completion of a degree program.

# **Degrees and Programs**

## Degrees

The Jackson School offers the Bachelor of Arts in Geological Sciences, the Bachelor of Science in Environmental Science, the Bachelor of Science in Geological Sciences, and, in partnership with the Cockrell School of Engineering, the Bachelor of Science in Geosystems Engineering and Hydrogeology. Whichever degree they pursue, geological sciences students must take courses in the Jackson School of Geosciences (JSG), the College of Natural Sciences, and the College of Liberal Arts. These units work together to meet students' individual needs and to ensure that they receive a superior education. Graduation from an accredited program is an advantage when applying for a position in industry, membership in a professional society or for registration as a professional geologist.

## **Core Curriculum**

Each student must complete the University's Core Curriculum (http:// catalog.utexas.edu/general-information/academic-policies-andprocedures/core-curriculum). The Core Curriculum includes the first-year signature course and courses in English composition, American and Texas government, American history, mathematics, science and technology, visual and performing arts, humanities, and social and behavioral sciences. The core is an integral part of all geosciences degree programs so graduates will be aware of their social responsibilities and the effects of technology on society.

## Flags

In the process of fulfilling geosciences degree requirements, students must also complete two courses beyond Rhetoric and Writing 306, or its equivalent, with writing flags, one quantitative reasoning flag, one global cultures flag, one cultural diversity in the United States flag, one ethics flag, and one independent inquiry flag. Courses that may be used to fulfill flag requirements are identified in the *Course Schedule* (https://registrar.utexas.edu/schedules) and may be used simultaneously to fulfill other requirements, unless otherwise specified.

## Foreign Language Requirement

Beginning level proficiency in a foreign language equivalent to one year (two semesters) competency is required. This requirement may be fulfilled by either completion of the two high school units in a single foreign language that are required for admission to the University as a freshmen or by earning college level foreign language credit to meet beginning level proficiency. For students who enter the University with fewer than two high school units in a single foreign language, the foreign language courses/credit used to address that deficiency may not be counted toward the total number of semester hours required for the GeoSci degree.

Students pursing the BA must fulfill additional foreign language requirements.

## **Research Courses**

Students in the BS Geological Sciences Option I, II, or III degree programs may count up to six semester hours of geological sciences research

courses toward the required total upper-division elective hours in geological sciences.

- Geological Sciences 371C and up to three credit hours of Geological Sciences 171C, 271C, and 371C;
- Geological Sciences 171H, 172H, 173H, and 379H; These courses are restricted to students enrolled in the Geological Sciences Departmental Honors Program

## **Simultaneous Majors**

A student in the Jackson School may pursue two majors simultaneously. The student must follow all procedures and meet all requirements outlined in *General Information* (http://catalog.utexas.edu/generalinformation/admission/undergraduate-admission) as well as those associated with both majors. A JSG student may not pursue any two geosciences majors, including the BS Environmental Science degree option, simultaneously.

The simultaneous major option is available only to undergraduates who have completed 30 hours of coursework in residence at the University and who have been admitted to both degree programs.

## Applicability of Certain Courses Physical Activity Courses

Physical activity (PED) courses and Kinesiology 119 may not be counted toward a degree in the Jackson School. However, they are counted as courses for which the student is enrolled, and the grades are included in the grade point average.

## **ROTC Courses**

The Departments of Air Force Science, Military Science, and Naval Science maintain ROTC units on campus. Information about each program is available from the chair of the department concerned.

Nine semester hours of coursework in air force science, military science, or naval science may be counted toward any degree in the Jackson School. Such credit may be used only as electives or to fulfill the writing requirement, and only by students who are commissioned by the University ROTC program.

## **Correspondence and Extension Courses**

During a long semester students enrolled in the Jackson School are not allowed to take courses at another school or institution or by correspondence or extension at the University unless approved in advance by the Associate Dean for Academic Affairs. Students must submit a concurrent enrollment petition and meet with a JSG academic adviser for approval well in advance of the start of the requested course.

No more than 30 percent of the semester hours required for any degree in the Jackson School may be completed online, by correspondence, or through distance learning, including University Extension courses. These courses are not included in certain metrics, such as total hours, residency status, etc., and therefore may affect students' eligibility for some JSG programs.

## Pass/Fail

All courses required for all geological sciences degrees must be taken for a letter grade unless the course is offered only on the pass/fail basis. A student may elect to take courses that do not count toward the degree or are being taken to remove a deficiency on the pass/fail basis rather than for a letter grade. To elect the pass/fail system of grading a student must have received at least 30 hours of college credit before registering for any course on the pass/fail basis, unless the course is offered only on the pass/fail basis. Complete rules on registration on the pass/fail basis are given in *General Information* (http://catalog.utexas.edu/general-information/admission/undergraduate-admission).

## **Bible Courses**

No more than 12 semester hours of Bible courses may be counted toward a degree.

# **Bachelor of Arts in Geological Sciences**

The Bachelor of Arts in Geological Sciences is a classical arts and sciences degree that gives students a great deal of flexibility in their choice of upper-division courses. Students must complete courses in the natural sciences, the social and behavioral sciences, and the humanities. This diversity of subjects provides an opportunity to learn about basic differences in outlook among different disciplines, the ways questions are raised and answered, and the ways the answers are validated and made relevant in practical use.

Students who plan to become professional geoscientists should pursue one of the BS Geological Sciences degree options. The BS Geological Sciences, Option V: UTeach is available for students interested in pursuing a career teaching math and science at the middle and secondary school level.

# Additional Requirements Specific to the BA Geological Sciences

The coursework counted toward the degree may include no more than 36 hours in any one field of study in the College of Liberal Arts or the College of Natural Sciences; and no more than 36 hours in any other single college or school of the University, including the Jackson School.

At least 18 semester hours of coursework in geological sciences, including six hours of upper-division coursework, must be completed in residence at the University. As long as all residence rules are met, credit may be earned by examination, by extension, by correspondence (up to 30 percent of the semester hours required for the degree), or, with the approval of the dean, by work transferred from another institution.

Degree requirements are divided into three categories: universitywide undergraduate degree requirements such as the University Core Curriculum and flag requirements, prescribed work for the degree, and major requirements. In addition, the student must fulfill the University's general requirements and the requirements of the Jackson School of Geosciences.

## **Prescribed Work**

## **BA Geological Sciences**

1. Foreign Language Requirement: The BA, Geological Sciences degree requires that students achieve Intermediate-level proficiency in a foreign language as part of the degree requirements. The foreign language requirement is the attainment of a certain proficiency, rather than the completion of a specified number of hours. The number of semesters and total number of hours required vary by language. Any part of the requirement may be fulfilled by credit by examination. Courses used to fulfill the foreign language requirement must be language courses; literature-in-translation courses, for example, may not be counted. Consult the Intermediate-level language proficiency course list to see which classes are required to complete this degree requirement for a specific language. Students are encouraged to consult with their academic adviser about fulfilling the foreign language degree requirement.

- Social Science: Three semester hours in social science, in addition to the course counted toward the social and behavioral sciences requirement of the core curriculum. The course must be chosen from the following fields and it must be in a different field from the course used to fulfill the Core Curriculum social and behavioral sciences requirement.
  - a. Anthropology
  - b. Economics
  - c. Geography
  - d. Linguistics
  - e. Psychology
  - f. Sociology
- 3. Natural Science: Six semester hours in natural sciences, in addition to the courses counted toward the science and technology requirements of the Core Curriculum. Courses must be chosen from the following fields; no more than three hours may be in either the history of science or the philosophy of science.
  - a. Astronomy
  - b. Biology
  - c. Chemistry
  - d. Marine science
  - e. Nutrition
  - f. Physical science
  - g. Physics
  - h. Mathematics
  - i. Computer science
  - j. Experimental psychology
  - k. Physical anthropology
  - I. Physical geography
  - m. Philosophy (courses in logic)
  - n. History of science and philosophy of science
- General Culture: Three semester hours in addition to the course counted toward the visual and performing arts requirement of the Core Curriculum. Courses in the following fields may be used:

   Architecture
  - b. Classical civilization, Greek, Latin
  - c. Art history, design, ensemble, fine arts, instruments, music, studio art, theatre and dance, visual art studies
  - d. Philosophy (excluding courses in logic)
- Interdisciplinary Studies: 12 semester hours, of which at least six must be upper-division courses, in any one of the disciplines listed below. These courses must be in addition to those counted toward the Core Curriculum requirements, prescribed work or major requirements.
  - a. Anthropology
  - b. Astronomy
  - c. Biology
  - d. Business
  - e. Computer science
  - f. Chemistry
  - g. Education
  - h. Engineering
  - i. Geography
  - j. Mathematics
  - k. Physics
  - I. Other disciplines may be chosen with submission and approval of a petition through the JSG Student Services Office.

6. Enough additional upper-division coursework to total 36 semester hours.

## **Major Requirements**

## **BA Geological Sciences**

- 1. Geological Sciences 401 or 303, 405, 416K, 416M, and 420K.
- 2. Six semester hours in biology.
- 3. Chemistry 301 and 302.
- 4. Three semester hours in physics.
- 5. Enough additional coursework to total 32 semester hours in geological sciences.
- 6. A total of 120 hours of coursework including core, prescribed and major work.

## Suggested Arrangement of Courses BA Geological Sciences

First Year		
First Term	Hours Second Term	Hours
GEO 401 or 303	3 GEO 405	4
Mathematics	3 Biology	3
CH 301	3 CH 302	3
UGS 302 or 303	3 RHE 306	3
General Culture	3 GEO 012N	0
	15	13

Total credit hours: 28

Second Year		
First Term	Hours Second Term	Hours
GEO 416K	4 GEO 420K	4
GEO 416M	4 PHY 302K or 303K	3
Biology	3 US History	3
Foreign Language	5 Foreign Language	5
	16	15

Total credit hours: 31

#### Third Year

First Term	Hours Second Term	Hours
GEO Upper-division Elective	3 GEO Upper-division Elective	4
GEO Upper-division Elective	3 GEO Upper-division Elective	3
E 316L, 316M, 316N, or 316P	3 GOV 310L	3
Social Science (core)	3 Social Science (major)	3
Interdisciplinary Studies	3 Interdisciplinary Studies	3
	15	16

Total credit hours: 31

Fourth Year		
First Term	Hours Second Term	Hours
GEO Upper-division Elective	3 GEO Upper-division Elective	3
Interdisciplinary Studies Upper- division	3 GEO Upper-division Elective	3
GOV 312L	3 US History	3
Upper-division Elective	3 Visual / Perf Arts	3
Upper-division Elective	3 Interdisciplinary Studies Upper- division	3
	15	15

Total credit hours: 30

Total Credit Hours: 120

## Bachelor of Science in Environmental Science

# Admission to the Environmental Science Program

All freshmen and external transfer students majoring in environmental science (EVS) are first admitted to the University as entry-level EVS majors in the Jackson School of Geosciences, the College of Liberal Arts, or the College of Natural Sciences. After completing a minimum of 24 hours in residence, students may select the EVS degree plan that best suits their long-term interests and, if necessary, transfer to the appropriate college/school in accordance with the regulations and procedures set forth in that college or school's *General Information Catalog* (http://catalog.utexas.edu/general-information/ registration-tuition-and-fees/transfer-from-one-division-to-another-within-the-university).

## **Freshman Admission**

Freshmen applicants seeking admission to the EVS major through the Jackson School of Geosciences, the College of Liberal Arts, or the College of Natural Sciences must meet the calculus readiness requirement by the official admissions application deadline. More information about the calculus readiness requirement is available through the University Admissions Office or online (https:// admissions.utexas.edu/apply/calculus-readiness).

Freshmen applicants to the EVS major from all three colleges/schools are reviewed and admitted as a single cohort. Applicants should use the ApplyTexas (http://www.applytexas.org) online application and select the "Environmental Science, Entry-Level" major option listed in the Jackson School of Geosciences, the College of Liberal Arts, or the College of Natural Sciences as a first-choice major. Applicants should apply to the EVS program in the college that best suits their anticipated area of focus (geological sciences, or geographical sciences, or biological sciences, respectively).

## **External Transfer Admission**

Students who wish to transfer to the University from another college or university must apply to the Office of Admissions as described in *General Information* (http://catalog.utexas.edu/general-information/ registration-tuition-and-fees/transfer-from-one-division-to-another-withinthe-university). External transfer applicants seeking admission to the Environmental Science (EVS) Degree Program through the Jackson School of Geosciences, the College of Liberal Arts, or the College of Natural Sciences must demonstrate calculus readiness by the official admissions application deadline. Details regarding transfer calculus readiness are available through the University Admissions Office or online (https://admissions.utexas.edu/apply/calculus-readiness).

External transfer applicants to the EVS major from all three colleges/ schools are reviewed and admitted as a single cohort. Applicants should use the ApplyTexas (http://www.applytexas.org) online application and select the "Environmental Science, Entry-Level" major option listed in the Jackson School of Geosciences, the College of Liberal Arts, or the College of Natural Sciences as a first-choice major. Applicants should apply to the EVS program in the college that best suits their anticipated area of focus (geological sciences, geographical sciences, or biological sciences, respectively).

## Internal Transfer Admission

Internal transfer, entry-level applications submitted to the EVS major through the Jackson School of Geosciences, the College of Liberal

Arts, or the College of Natural Sciences are reviewed and admitted as a single cohort. All internal transfer applicants should use the online EVS Program Transfer Application (http://www.esi.utexas.edu/EVS) and must meet the requirements for internal transfer given in the *General Information Catalog* (http://catalog.utexas.edu/general-information/ registration-tuition-and-fees/transfer-from-one-division-to-another-within-the-university).

To be competitive for admission, internal transfer applicants should have a grade point average of at least 3.00 in Biology 311C, Chemistry 301, Mathematics 408C or 408N or 408K, and Geological Sciences 401 or 303.

Additional Information for all internal transfer applicants:

- Application Deadline: March 1st for entry the following academic year.
- Only currently enrolled students in good academic standing with their college of residence may apply.
- Students may apply during the semester they are completing the minimum requirements to be eligible for consideration.
- Entry-level admission to all Environmental Science majors is offered as a space is available to the students who are best qualified. Decisions are based on the student's grade point average in the introductory science and math courses listed above, University grade point average, and other factors including, but not limited to, difficulty of course load, course repetitions, proven mathematical ability, and interest in the field of Environmental Science.

Students should consult with an Academic Adviser for additional information on the application process and deadlines.

# The Bachelor of Science in Environmental Science

The Bachelor of Science in Environmental Science degree program is designed for students interested in an interdisciplinary scientific perspective on environmental and sustainability issues, analysis, and management. The degree program provides the broad foundation in physical, life, and social sciences needed for a career or graduate study in environmental science and related fields such as climate change, ecology, and conservation. Students who complete the program successfully will be able to assess environmental issues critically from multiple perspectives; perform field, laboratory, and computer analyses; and conduct original research. The program is designed to prepare graduates for careers in local, state, and federal government laboratories and nonprofit agencies, environmental consulting firms, environmental education and outreach agencies, and universities and other research settings. The degree is offered by the Jackson School with a major in geological sciences, by the College of Liberal Arts with a major in geographical sciences, and by the College of Natural Sciences with a major in biological sciences. The degree programs share common prescribed work, but each major has its own specific requirements. Students may earn only one Bachelor of Science in Environmental Science degree from the University.

The Bachelor of Science in Environmental Science curriculum consists of 126 semester hours of coursework. All students must complete the University's core curriculum. The specific degree requirements consist of prescribed work, major requirements, and electives. In some cases, a course that is required for the degree may also be counted toward the core curriculum.

A course in one prescribed work area may not also be used to fulfill the requirements of another prescribed work area; the only exception to this

rule is that a course that fulfills any other requirement may also be used to fulfill a flag requirement unless otherwise specified.

In the process of fulfilling the core curriculum and other degree requirements, all students are expected to complete the following Skills and Experience flags:

- Writing: three flagged courses beyond Rhetoric and Writing 306 or its equivalent; students in the College of Natural Sciences and the Jackson School of Geosciences must complete only two flagged writing courses. For students in the College of Natural Sciences, at least one writing flag must be from an upper-division course.
- 2. Quantitative reasoning: one flagged course.
- 3. Global cultures: one flagged course.
- 4. Cultural diversity in the United States: one flagged course.
- 5. Ethics: one flagged course.
- 6. Independent inquiry: one flagged course.

## Prescribed Work Common to All Environmental Science Majors

- 1. Mathematics: Mathematics 408C, or 408N and 408S, or 408K and 408L
- 2. Chemistry: Chemistry 301 or 301H; Chemistry 302 or 302H; and Chemistry 204
- 3. Physics: Physics 317K and 117M, or another four-hour calculusbased physics sequence.
- 4. Biological Sciences: Biology 311C and 311D, or 315H
- 5. Ecology:
  - a. Biology 373 or Marine Science 320. Marine Science 320 may not be used to satisfy both requirement 5a and requirement 10c
  - Biology 373L or Marine Science 120L. Environmental Science majors in the College of Natural Sciences must choose Biology 373L
- 6. Geological Sciences: Geological Sciences 401 or 303, 346C, and an approved geological sciences course in sustainability
- 7. Geography: Geography 335N
- Field experience and research methods: Environmental Science 311 and 121
- 9. Senior field/research experience: one of the following pairs:
  - a. Environmental Science 271 and 371 or Environmental Science 171 and 471
  - b. Environmental Science 172C and 472D or Environmental Science 272C and 372D
  - c. Environmental Science 271 or Marine Science 348, and one of the following: Chemistry 320M, Geography 460G, 368C, 462K, Geological Sciences 327G, Mathematics 408D or 408M. Note: Geography 460G, 462K, and Geological Sciences 327G may not be used to satisfy both requirement 9c and 10b. Biology 277 may substitute for Environmental Science 271 with prior approval of the faculty adviser.
- 10. Environmental and sustainability themes: One course in each of the following thematic areas:
  - Environmental and sustainability policy, ethics, and history: Geography 334, 336C, 340D, 342C, 356C, Journalism 346F, Marine Science 367K, and Philosophy 325C. Biology 337, Geography 356, 356T, or Sociology 321K may be counted with prior approval of the faculty adviser
  - Geographic information systems: Geography 460G, 462K, Geological Sciences 327G

- c. Climates and oceans: Biology 456L, Geography 333K, Geological Sciences 347D, 347G, 377P, Marine Science 320, 440, 352, 354Q, 354T, 356. Marine Science 320 may not be used to satisfy both requirement 5 and 10. Geography 356T, Geological Sciences 371C, and Marine Science 352 may count with prior approval of the faculty adviser
- d. Environmental economics, sustainability, and business:
   Economics 304K, Economics 330T, Advanced Placement credit for Economics 304L may be used to satisfy this requirement
- 11. Environmental Science 141 and 151

## **Major Requirements**

## **BS EVS: Geological Sciences**

The following 36 semester hours of coursework are required; these hours must include at least 12 hours of approved upper-division work in geological sciences.

- 1. Geological Sciences 405, 416K, 416M and 420K
- 2. Mathematics 408D or 408M
- Four semester hours of physics in one of the following second semester sequences: Physics 316 and 116L, 317L and 117N, or 303L and 103N
- 4. One of the following courses on climate and water. Geological Sciences 347D, 347G, 376E, 476K, 476M, 376S, 377P (The same course may not be used to satisfy both requirement 4 of the major requirements and requirement 10 of the prescribed work).
- 5. Nine additional semester hours of upper division elective coursework in geological sciences not otherwise used to satisfy either prescribed or other major requirements.
- 6. Enough additional coursework to make a total of 126 semester hours.

## **Special Requirements**

Students must fulfill the University-wide General Requirements, the Special Requirements of the Jackson School, and the Requirements for All Geological Sciences Degree Plans given earlier in this section. They must also earn a grade of at least *C*- in each course required for the degree, and a grade point average in these courses of at least 2.00. More information about grades and the grade point average is given in the *General Information Catalog* (http://catalog.utexas.edu/general-information/registration-tuition-and-fees/transfer-from-one-division-to-another-within-the-university).

To graduate under the honors option, students must remain in good standing in the Dean's Scholars Honors Program, must submit an honors thesis approved by the program honors adviser, and must present their research in an approved public forum, such as the college's annual Undergraduate Research Forum. More information about the Undergraduate Research Forum is available online (https:// cns.utexas.edu).

## Suggested Arrangement of Courses BS Environmental Science: Geological Sciences

First Year		
First Term	Hours Second Term	Hours
UGS 303	3 EVS 311	3
GEO 401 or 303	3 BIO 311C	3
CH 301	3 CH 302	3
M 408C	4 M 408D	4

RHE 306	3 Visual / Perf Arts	3
	16	16

Total credit hours: 32

Second Year		
First Term	Hours Second Term	Hours
BIO 311D	3 GEO 405	4
PHY 317K	3 GEO 346C	3
PHY 117M	1 GeoSci Sustainability	3
GOV 310L	3 EVS 121	1
E 316L, 316M, 316N, or 316P	3 Env Eco & Bus	3
Social Science	3 CH 204	2
	16	16

Total credit hours: 32

Third Year

Third Teal		
First Term	Hours Second Term	Hours
GEO 416K	4 GEO 420K	4
GEO 416M	4 PHY 317L	3
GRG 335N	3 PHY 117N	1
GEO Upper-division	3 EVS 271	2
Elective	2 GEO Upper-division	3
	History	3
	16	16

Total credit hours: 32

Fourth Year		
First Term	Hours Second Term	Hours
EVS 141	1 EVS 151	1
EVS 371	3 Climate & Oceans	3
Geographic Information Systems	3 Env Policy & Politics	3
MNS 320	3 GOV 312L	3
MNS 120L	1 History	3
Climate & Water	3 GEO Upper-division	3
	14	16

Total credit hours: 30

Total Credit Hours: 126

# Bachelor of Science in Geological Sciences

## Requirements for All Geological Sciences Degree Plans

Each student must complete the University's core curriculum. In the process of completing core curriculum and geological sciences degree requirements, students must also earn credit for seven flags including: two writing flags, one quantitative reasoning flag, one global cultures flag, one cultural diversity in the United States flag, one ethics flag, and one independent inquiry flag. In some cases, a course required for the degree/major may also be counted toward the core curriculum. Flags may be added to courses periodically; courses that may be used to fulfill flag requirements are identified in the *Course Schedule* (https://registrar.utexas.edu/schedules). Students are encouraged to discuss options for completing flag requirements with his or her academic adviser.

A course in one prescribed work area may not also be used to fulfill the requirements of another prescribed work or major requirement; the only exception to this rule is that a course that fulfills any other requirement may also be used to fulfill a core curriculum requirement, or a flag requirement if the course carries that flag, unless otherwise specified.

A cumulative grade point average of at least 2.00 is required on all work undertaken at the University for which a grade or symbol other than *Q*, *W*, *X*, or *CR* is recorded. In addition, a grade point average of at least 2.00 is required in geological sciences courses counted toward the major requirement.

A grade of at least *C*- is required in each science, mathematics, and engineering course used to fulfill any of the requirements for the degree, and in each course used to fulfill a Technical Elective requirement. The official grade in a course is the last one made; however, if a student repeats a course and has two or more grades, all grades and all semester hours are used to calculate the University grade point average and to determine the student's scholastic eligibility to remain in the University and his or her academic standing in the Jackson School of Geosciences.

All University students must complete at least 60 semester hours of the coursework counted towards the degree in residence. Individual degree(s) or degree options may contain additional course residency requirements.

In addition, the student must fulfill the University's general requirements and the requirements of the Jackson School of Geosciences.

## Length of Degree Program

An eight-semester arrangement of courses leading to the bachelor's degree is given for each of the geological sciences degree plans. The order in which the courses are taken is critical due to the prerequisites for required courses and schedule when courses are offered. A student who registers for fewer than the indicated number of hours for each semester or skips prerequisite courses may need more than eight semesters to complete the degree. The student is responsible for including in each semester's work any courses that are prerequisite to those he or she will take the following semester.

## Foreign Language Requirement

In accordance with the University's basic education requirements, all students must demonstrate proficiency in a foreign language equivalent to that shown by completion of two semesters of college coursework. Credit earned at the college level to achieve that proficiency may not be counted toward a degree. For a student admitted to the University as a freshman, this requirement is fulfilled by completion of the two high school units in a single foreign language that are required for admission; students admitted with a deficiency in foreign language must remove that deficiency as specified in *General Information* (http:// catalog.utexas.edu/general-information/admission/undergraduate-admission/#freshmanadmissiontext).

# **Option I: General Geology**

# Bachelor of Science in Geological Sciences

The Bachelor of Science in Geological Sciences serves as a professional degree for students planning careers as geologists, geophysicists, or teachers, as well as for those planning to pursue graduate work in the geosciences or a profession such as law or business. Careers are available in the petroleum and related energy industries, resource evaluation, mineral exploration, geologic hazard monitoring, environmental control and reclamation, building foundation evaluation, groundwater contamination studies, soil testing, regional planning, watershed management, climate modeling, and college or secondary school teaching. Graduates may also work in state or federal agencies, in universities or museums, with consulting firms, or with service companies to the energy and mineral industries.

Degree requirements are divided into three categories: university-wide undergraduate degree requirements (the University core curriculum) and flag requirements, prescribed work for the degree, and major requirements. Taken together, these courses make up an option, a degree plan with a particular concentration or emphasis. Thus, students may develop intellectually challenging yet different plans of study according to their personal interests and goals.

Students seeking the Bachelor of Science in Geological Sciences degree must choose one of four options--I: General Geology, II: Geophysics, III: Hydrogeology, or V: Teaching. (Option IV: Environmental Science and Sustainability is no longer offered.)

## Additional Requirements Specific to the BS Geological Sciences, Opts I, II, & III

36 semester hours of upper-division coursework must be completed in residence at the University. At least 18 of these hours must be in geological sciences and at least 12 of the 36 hours must be outside geological sciences.

A total of 126 hours of coursework including core, prescribed, and major work.

## Prescribed Work

## BS Geological Sciences, Option I, II, & III

- 1. Mathematics 408C and 408D: or 408K, 408L, and 408M. Mathematics 408C or 408K also meets the mathematics requirement of the core curriculum. Algebra courses at the level of Mathematics 301 or the equivalent may not be counted toward the total number of semester hours required for the degree.
- 2. Physics 301, 101L, 316, and 116L; or Physics 303K, 103M, 303L, and 103N.
- 3. Chemistry 301 and 302. Together, requirements 2 and 3 also meet parts I and II of the science and technology requirement of the core curriculum.
- 4. Geological Sciences 401 or 303, 416K, 416M, 420K, and 428.
- 5. Technical Electives: 12 semester hours of approved science and engineering courses offered outside of the GEO Field of study with no more than six semester hours of lower-division courses. These courses may be coordinated with additional recommended GEO elective courses to form a geoscience course concentration. A list of approved technical elective courses and geoscience course concentrations is available in the JSG Advising Office.
- 6. Language or Culture Electives: Six semester hours of coursework in a foreign language or approved coursework recognized as a study of cultures on a domestic or global scale. A list of approved cultural courses is available in the JSG Advising Office. Courses that fulfill this requirement must be in addition to courses counted toward the core curriculum or flag requirements.

## Major Requirements

- 1. Geological Sciences 405, 325G, and 426P.
- 2. Six semester hours of approved field and/or research coursework. This requirement may be met by Geological Sciences 660A and 660B. Field/research requirements courses should be completed during the same summer semester.
- 3. 15 additional hours of approved upper division coursework in geological sciences.

## **Suggested Arrangement of Courses BS Geological Sciences, Option I: General** Geology

First Year	
First Term	Hours Second Term
GEO 401 or 303	4 GEO 405

	17	14
RHE 306	3 GEO 012N	0
UGS 302 or 303	3 E 316L, 316M, 316N, or 316P	3
CH 301	3 CH 302	3
M 408C	4 M 408D	4
GEO 401 or 303	4 GEO 405	4

Hours

Total credit hours: 31

#### Second Vear

First Term	Hours Second Term	Hours
GEO 416K	4 GEO 420K	4
GEO 416M	4 GEO 325G	3
PHY 303K	3 PHY 303L	3
PHY 103M	1 PHY 103N	1
HIS 315K	3 Visual/Performing Arts	3
	15	14

Total credit hours: 29

Third Year		
First Term	Hours Second Term	Hours
GEO 428	4 GEO 426P	4
GEO Upper-division Elective	3 Tech Elective	3
Tech Elective	3 GEO Upper-division Elective	3
HIS 315L	3 Upper-division Elective	3
Language or Culture	3	
	16	13

Total credit hours: 29

Third Year	
Summer Term	Hours
GEO 660A	3
GEO 660B	3
	6

Total credit hours: 6

Fourth Year		
First Term	Hours Second Term	Hours
GEO Upper-division Elective	3 GEO Upper-division Elective	4
GEO Upper-division Elective	3 Upper-division Tech Elective	3
Upper-division Tech Elective	3 Social/Behavioral Science	3
GOV 310L	3 GOV 312L	3
Language or Culture	3 Upper-division Elective	3
	15	16

Total credit hours: 31

Total Credit Hours: 126

## **Option II: Geophysics**

## **Major Requirements**

- 1. Mathematics 427J and 427L
- 2. Physics 315 and 115L
- 3. Geological Sciences 325G, 325K, 354, 365P, 465K, 366M
- 4. Six semester hours of approved field and/or research coursework. This requirement may be met by Geological Sciences 348K, 660A/660B, 661A/661B, 376L, 679G, or an approved off-campus

geophysics field or research course. Field/research requirement courses should be completed during the same summer semester.

5. Three additional hours of approved upper-division coursework in geological sciences.

## Suggested Arrangement of Courses BS Geological Sciences, Option II: Geophysics

First Year		
First Term	Hours Second Term	Hours
GEO 303	3 PHY 301	3
M 408C	4 PHY 101L	1
CH 301	3 M 408D	4
UGS 302 or 303	3 CH 302	3
RHE 306	3 E 316L, 316M, 316N, or 316P	3
	16	14

Total credit hours: 30

Second Year		
First Term	Hours Second Term	Hours
GEO 416K	4 GEO 420K	4
GEO 416M	4 GEO 325G	3
PHY 316	3 PHY 315	3
PHY 116L	1 PHY 115L	1
M 427J	4 M 427L	4
	16	15

Total credit hours: 31

Third Year		
First Term	Hours Second Term	Hours
GEO 325K	3 GEO 365P	3
GEO 465K	4 Visual/performing arts	3
GEO 428	4 Social/behavioral science	3
Tech elective	3 Tech elective	3
	Language or culture	3
	14	15

Total credit hours: 29

Third Year

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Summer Term	Hours
Field / Research Course	6
	6

Total credit hours: 6

Fourth Year		
First Term	Hours Second Term	Hours
GEO 366M	3 GEO 354	3
Language or culture	3 Geological Sciences upper-division elective course	3
Tech elective (upper-division)	3 Tech elective (upper-division)	3
GOV 310L	3 GOV 312L	3
HIS 315K or 315L	3 HIS 315K or 315L	3
	15	15

Total credit hours: 30

Total Credit Hours: 126

# **Option III: Hydrogeology**

## **Major Requirements**

- 1. Mathematics 427J
- 2. Chemistry 204

- 3. Geological Sciences 325G, 476K, 476M, 376S
- 4. Geological Sciences 376L and an additional three semester hours of approved field experience coursework. This requirement may be met by Geological Sciences 660A/660B, 476W, 377K or 679J. Other off-campus hydrogeology field/research courses will be considered upon petition submitted to the Jackson School prior to that semester registration period. Field/research requirement courses should be completed during the same summer semester.
- 5. Nine additional semester hours of approved upper-division coursework in geological sciences.

## Suggested Arrangement of Courses BS Geological Sciences, Option III: Hydrogeology

First Year		
First Term	Hours Second Term	Hours
GEO 401 or 303	4 E 316L, 316M, 316N, or 316P	3
M 408C	4 M 408D	4
CH 301	3 CH 302	3
UGS 302 or 303	3 CH 204	2
RHE 306	3 HIS 315K or 315L	3
	17	15

Total credit hours: 32

Second Year		
First Term	Hours Second Term	Hours
GEO 416K	4 GEO 420K	4
GEO 416M	4 M 427J	4
PHY 303K	3 PHY 303L	3
PHY 103M	1 PHY 103N	1
HIS 315K or 315L	3 GEO 325G	3
	15	15

Total credit hours: 30

Third Year		
First Term	Hours Second Term	Hours
GEO 428	4 GEO 476M	4
GEO 476K	4 Tech Elective	3
Tech Elective	3 GOV 312P	3
GOV 310L	3 GEO Upper-division Elective	3
	Upper-division Elective	3
	14	16

Total credit hours: 30

Third Year	
Summer Term	Hours
GEO 376L	3
Field Experience	3
	6

Total credit hours: 6

Fourth Year		
First Term	Hours Second Term	Hours
GE0 376S	3 GEO Upper-division Elective	3
GEO Upper-division Elective	4 Social/Behavioral Science	3
Language or Culture	3 Language or Culture	3
Upper-division Tech Elective	3 Upper-division Tech Elective	3
	Visual/Performing Arts	3
	13	15

Total credit hours: 28

Total Credit Hours: 126

## **Option V: Teaching**

The BS Geological Sciences, Option V: Teaching is designed to fulfill the course requirements for composite science teacher certification for middle school or secondary with geological sciences as the primary teaching field.

## Additional Requirements Specific to the BS Geological Sciences, Option V: Teaching

Students must meet the following requirements to graduate and be recommended for certification.

- · University grade point average of at least 2.50.
- · Successful completion of secondary teacher certification and identified discipline specific content courses.
- · Successful passing of final teaching portfolio review, conducted by the UTeach-Natural Sciences program. Information about the portfolio review and additional certification requirements is available from the UTeach-Natural Sciences academic adviser.

Composite certification requires 24 semester hours of coursework in the primary field, 12 hours in a second field, and six hours each in two additional fields.

Degree requirements are divided into three categories: University-wide undergraduate degree requirements (the University core curriculum) and flag requirements, prescribed work for the degree, and major requirements. In addition, the student must fulfill the University's general requirements and the requirements of the Jackson School of Geosciences.

## Prescribed Work

- 1. Biology 337 (Topic 2: Research Methods: UTeach), Chemistry 368 (Topic 1: Research Methods: UTeach), or Physics 341 (Topic 7: Research Methods: UTeach)
- 2. History 329U or Philosophy 329U
- 3. 18 semester hours of professional development coursework, consisting of:
  - a. Curriculum and Instruction 651S;
  - b. UTeach-Natural Sciences 101, 110, 350, 355, 360, and 170
- 4. For students seeking middle school certification, the following coursework is required:
  - a. Educational Psychology 350G, or Psychology 301 or 304
  - b. Curriculum and Instruction 339E

## **Major Requirements**

- 1. Mathematics 408C. This course also meets the mathematics requirement of the core curriculum. Algebra courses at the level of Mathematics 301 or the equivalent may not be counted toward the total number of semester hours required for the degree.
- 2. To meet the requirements of composite certification, the student must complete the following courses. In meeting this requirement, the student also fulfills parts I and II of the science and technology requirement of the core curriculum.
  - a. Biology 311C and 311D
  - b. Chemistry 301 and 302
  - c. Physics 302K, 102M, 302L, and 102N; or 301, 101L, 316, and 116L; or an equivalent sequence

- d. Enough additional approved coursework in biology, chemistry, or physics to provide the required 12 semester hours in a second field
- 3. Astronomy 303, 307, or 367M; and Marine Science 307.
- 4. Geological Sciences 401 or 303, 405, 416K, 416M, 420K or 320L, and 335
- 5. Enough additional upper-division coursework to total at least 28 semester hours in geological sciences.
- 6. Enough additional coursework to total 128 semester hours including core, prescribed and major work.

## Suggested Arrangement of Courses BS Geological Sciences, Option V: Teaching

First Year		
First Term	Hours Second Term	Hours
GEO 401 or 303	3 GEO 405	4
M 408C	4 CH 302	3
CH 301	3 UTS 110	1
UTS 101	1 BIO 311C	3
UGS 302 or 303	3 RHE 306	3
	14	14

Total credit hours: 28

Second Year		
First Term	Hours Second Term	Hours
GEO 416K	4 GEO 420K or 320L	4
GEO 416M	4 HIS 329U or PHL 329U	3
BIO 311D	3 PHY 303K & PHY 103M	4
EDC 365C or UTS 350	3 Social Science	3
EDP 350G, PSY 301, or PSY 304	3 EDC 365D or UTS 355	3
	17	17

Total credit hours: 34

Second Year	
Summer Term	Hours
GOV 310L	3
E 316L, 316M, 316N, or 316P	3
	6

Total credit hours: 6

Third Year		
First Term	Hours Second Term	Hours
GEO Upper-division Elective	4 GEO Upper-division Elective	3
GOV 312L	3 MNS 307	3
PHY 303L	4 Upper-division Elective (Science)	3
& PHY 103N		
Elective (Science)	3 GEO 335	3
BIO 337	3 History	3
	17	15
Total credit hours: 32		

Fourth Year		
First Term	Hours Second Term	Hours
GEO Upper-division Elective	3 EDC 651S	6
EDC 365E	3 UTS 170	1
EDC 339E (or replace with second three-hour history course)	3 History	3
AST 303, 307, or 367M	3 GEO Upper-division Elective	3

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13

Total credit hours: 28

Total Credit Hours: 128

## Bachelor of Science in Geosystems Engineering and Hydrogeology

Geosystems engineers and hydrogeologists are concerned with the development and use of engineering approaches in the management of natural resources from the earth's surface and subsurface, environmental restoration of subsurface sites, and other processes related to the earth sciences. This degree program, offered jointly by the Cockrell School of Engineering and the Jackson School of Geosciences, is designed to teach students the geological and engineering principles needed to solve subsurface resource development and environmental problems. The curriculum includes a fundamental sequence of engineering and geological sciences courses in such areas as multiphase fluid flow, physical hydrology, heat and mass transfer, field methods, and engineering design. This interdisciplinary systems approach, combining engineering and geological sciences, is increasingly required to address complex real-world problems such as characterization and remediation of aquifers. The degree program is designed to prepare graduates for employment with environmental, water resource management, and energy companies in addition to many government agencies. Better-qualified graduates of the program may pursue graduate study in subsurface environmental engineering, petroleum engineering, geology, and other related fields.

The objective of the degree program is to prepare graduates for successful careers in the fields of subsurface environmental engineering (including carbon dioxide sequestration), oil and gas production and services, or similar pursuits. Graduates are expected to understand the fundamental principles of science and engineering behind the technology of geosystems engineering and hydrogeology to keep their education from becoming outdated and to give them the capability of self-instruction after graduation. They should also be prepared to serve society by applying the ideals of ethical behavior, professionalism, and environmentally responsible stewardship of natural resources.

Containing the following elements, the technical curriculum provides both breadth and depth in a range of topics.

- A combination of college-level mathematics and basic sciences (some with experimental work) that includes mathematics through differential equations, physics, chemistry, and geology
- Basic engineering and geologic topics that develop a working knowledge of fluid mechanics, strength of materials, transport phenomena, material properties, phase behavior, and thermodynamics
- Engineering and geosciences topics that develop competence in characterization and evaluation of subsurface geological formations and their resources using geoscientific and engineering methods, including field methods; design and analysis of systems for producing, injecting, and handling fluids; application of hydrogeologic and reservoir engineering principles and practices for water and energy resource development and management; contamination evaluation and remediation methods for hydrologic resources; and use of project economics and resource valuation methods for design and decision making under conditions of risk and uncertainty

 A major capstone design experience that prepares students for engineering and hydrogeologic practice, based on the knowledge and skills acquired in earlier coursework and incorporating engineering and geological standards and realistic constraints

## **Portable Computing Devices**

Students entering Geosystems Engineering and Hydrogeology are required to have access to a portable computing device capable of running programs suitable for use in the classroom and on the university wireless network. The use of this device will be necessary in many required courses, and individual instructors may require the device be brought to class or lab sessions. For a list of minimum system requirements see http://www.pge.utexas.edu/future/undergraduate/ program.

## Curriculum

Course requirements include courses within the Cockrell School of Engineering and other required courses. In addition, each student must complete the University's Core Curriculum (p. 22). In some cases, a course that fulfills one of the following requirements may also be counted toward core curriculum or flag requirements; these courses are identified below.

In the process of fulfilling engineering degree requirements, students must also complete coursework to satisfy the following flag requirements: one independent inquiry flag, one course with a quantitative reasoning flag, one ethics flag, one global cultures flag, one cultural diversity in the US flag, and two writing flags. The independent inquiry flag, the quantitative reasoning flag, the ethics flag, and both writing flags are carried by courses specifically required for the degree; these courses are identified below. Courses that may be used to fulfill flag requirements (p. 23) are identified in the *Course Schedule* (http://registrar.utexas.edu/schedules).

Courses used to fulfill technical and nontechnical elective requirements must be approved by the petroleum and geosystems engineering faculty and the geological sciences faculty before the student registers for them.

Requirements		Hours	
Petroleum and Geosyste	m Engineering Courses		
PGE 310	Formulation and Solution of Geosystems Engineering Problems	3	3
PGE 322K	Transport Phenomena in Geosystems	3	3
PGE 323K	Reservoir Engineering I: Primary Recovery	3	3
PGE 323L	Reservoir Engineering II: Secondary and Tertiary Recovery	3	3
PGE 326	Thermodynamics and Phase Behavior	3	3
PGE 333T	Engineering Communication (writing flag and ethics flag)	3	3
PGE 365	Resource Economics and Valuation	3	3
PGE 358	Principles of Formation Evaluation	3	3
PGE 373L	Geosystems Engineering Design and Analysis (independent inquiry flag)	3	3
PGE 424	Petrophysics	4	4
PGE 427	Properties of Petroleum Fluids (Properties of Petroleum Fluids)	2	4
Chemistry			

Chemistry

CH 301	Principles of Chemistry I (part II science and technology)	3
CH 302	Principles of Chemistry II	3
Civil Engineering		U
C F 357	Geotechnical Engineering	3
Engineering Mechanics	y	
E M 306	Statics	3
E M 319	Mechanics of Solids	3
Geological Sciences		
GEO 303	Introduction to Geology	3
GEO 376L	Field Methods in Groundwater Hydrology	3
GEO 376S	Physical Hydrology	3
GEO 416K	Earth Materials	4
GEO 416M	Sedimentary Rocks	4
GEO 420K	Introduction to Field and Stratigraphic Methods	4
GEO 428	Structural Geology	4
GEO 476K	Groundwater Hydrology (writing flag)	4
Mathematics		
M 408C	Differential and Integral Calculus (mathematics; quantitative reasoning flag)	4
M 408D	Sequences, Series, and Multivariable Calculus	4
M 427J	Differential Equations with Linear Algebra (quantitative reasoning flag)	4
or M 427K	Advanced Calculus for Applications I	
Physics		
PHY 103M	Laboratory for Physics 303K	1
PHY 103N	Laboratory for Physics 303L	1
РНҮ 303К	Engineering Physics I (part I science and technology; quantitative reasoning flag)	3
PHY 303L	Engineering Physics II (part I science and technology; quantitative reasoning flag)	3
Other Required Courses		
Approved engineering el	ective	3
Approved geosciences to	echnical elective	3
Rhetoric and Writing		
RHE 306	Rhetoric and Writing (English composition)	3
<b>Remaining Core Curricul</b>	um Courses	
E 316L	British Literature <sup>1</sup>	3
or E 316M	American Literature	
or E 316N	World Literature	
or E 316P	Masterworks of Literature	
American government <sup>2</sup>		6
American history <sup>2</sup>	3	6
Visual and performing an		3
Social and behavioral sc		3
UGS 302	First-Year Signature Course <sup>4</sup>	3
or UGS 303	First-Year Signature Course	

<ol> <li>Some sections of the English humanities courses (E 316L, 316M, 316N, 316P) carry a global cultures or cultural diversity flag.</li> </ol>
2. Some sections carry a cultural diversity flag.
<ol><li>Some sections carry a global cultures and/or cultural diversity flag.</li></ol>
<ol> <li>In UGS 302, all sections carry a writing flag. In UGS 303, some sections carry a writing flag.</li> </ol>
Total Hours

132

## Suggested Arrangement of Courses BS Geosystems Engineering and Hydrogeology

First Year			
First Term	Hours Second Term	Hours	
CH 301	3 CH 302	3	
GEO 303	3 M 408D	4	
M 408C	4 PHY 303K	3	
RHE 306	3 PHY 103M	1	
UGS 302 or 303	3 PGE 333T	3	
	American history	3	
	16	17	
Second Year			
First Term	Hours Second Term	Hours	
GEO 416K	4 E M 319	3	
GEO 416M	4 PGE 310	3	
E M 306	3 PGE 427	4	
M 427J or 427K	4 PGE 326	3	
	PHY 303L	3	
	PHY 103N	1	
	15	17	
Third Year			
First Term	Hours Second Term	Hours Summer Term	Hours
GEO 476K	4 C E 357	3 GEO 376L	3
PGE 322K	3 GEO 420K	4	
PGE 323K	3 PGE 323L	3	
PGE 424	4 PGE 358	3	
Social and behavioral sciences	3 American government	3	
	17	16	3
Fourth Year			
First Term	Hours Second Term	Hours	
E 316L, 316M, 316N, or 316P	3 PGE 373L	3	
GEO 428	4 Geoscience technical elective	3	
GEO 376S	3 American government	3	
PGE 365	3 American history	3	
PGE 365 Engineering technical elective	-	3 3	

Total credit hours: 132

## **Minor and Certificate Programs**

## Minor

The transcript-recognized undergraduate academic minor must be completed in conjunction with an undergraduate degree at The University of Texas at Austin. For more information regarding the requirements for achieving a minor, including a comprehensive list of minors, please visit the Minors and Certificate Programs (p. 13) section of the *Undergraduate Catalog*.

## **Certificate Programs**

# Computational Science and Engineering Certificate

The Computational Science and Engineering Certificate program is sponsored by the Cockrell School of Engineering, the Jackson School of Geosciences, the College of Liberal Arts, and the College of Natural Sciences; it is administered by the Institute for Computational Engineering and Sciences (ICES). Information regarding the specific requirements of the Certificate can be found in the Cockrell School of Engineering's Minor and Certificates (p. 227) section of the Undergraduate Catalog.

## Courses

The faculty has approval to offer the following courses in the academic years 2018-2019 and 2019-2020; however, not all courses are taught each semester or summer session. Students should consult the *Course Schedule* (https://registrar.utexas.edu/schedules) to determine which courses and topics will be offered during a particular semester or summer session. The *Course Schedule* (https://registrar.utexas.edu/schedules) may also reflect changes made to the course inventory after the publication of this catalog.

A full explanation of course numbers is given in *General Information* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/credit-value-and-course-numbers). In brief, the first digit of a course number indicates the semester hour value of the course. The second and third digits indicate the rank of the course: if they are 01 through 19, the course is of lower-division rank; if 20 through 79, of upper-division rank; if 80 through 99, of graduate rank.

## **Environmental Science: EVS**

## **Lower-Division Courses**

## EVS 311. Field Seminar in Sustainability.

Restricted to environmental science majors. Introduces field observation and analysis of environmental processes and sustainability issues. Subjects include ecology, hydrogeology, marine science, climate science, energy, and campus sustainability. Two lecture hours and four laboratory or field laboratory hours a week for one semester. Prerequisite: Consent of instructor.

## **Upper-Division Courses**

## EVS 121. Research Methods.

Restricted to students pursuing a Bachelor of Science in Environmental Science. Overview of the methods involved in research projects designed to help prepare students in independent research projects or internships. One lecture hour and one workshop hour a week for one semester. Offered on the letter-grade basis only. Prerequisite: Environmental Science 311 with a grade of at least C-.

## EVS 331. Research Methods for the Environmental Sciences.

Restricted to environmental science majors. Subjects include experimental design, statistical analysis and modeling, and ethics. Students develop and conduct an independent research project during the laboratory portion of the course. Two lecture hours and four laboratory or field laboratory hours a week for one semester. Prerequisite: Environmental Science 311 with a grade of at least C-.

## EVS 141. Environmental Science Professionalism I.

Restricted to environmental science majors. Examines the fundamental, nontechnical aspects of environmental science and sustainability practices through the use of case studies and projects that use interdisciplinary approaches. Subjects may include the importance of interdisciplinary collaboration in addressing and assessing environmental science processes, the development of professional opportunities across disciplines, understanding professional responsibilities, applying ethical principles, the balance of multidisciplinary demands in professional practice, and the need for lifelong learning. One lecture hour a week for one semester. Prerequisite: Senior standing, Environmental Science 311, and 331 with a grade of at least C- in each.

## EVS 151. Environmental Science Professionalism II.

Restricted to environmental science majors. Examines the fundamental, nontechnical aspects of environmental science and sustainability practices. Focuses on the use of interdisciplinary communication for addressing and assessing environmental science processes, the challenges posed by communicating across disciplines, the development of professional communication and public speaking skills, effective presentation of research, the ethics and practices of peer research review, and effective communication of the effects of environmental science in a global society. One lecture hour a week for one semester. Prerequisite: Environmental Science 141.

## EVS 171, 271, 371, 471. Research Experience.

Restricted to environmental science majors. Supervised study of selected topics in environmental science by individual arrangement with the instructor. Conference course. May be repeated for credit when the topics vary. Prerequisite: Consent of instructor.

# EVS 172C, 272C, 372C, 472C. Senior Research Proposal in Environmental Science.

Restricted to seniors in the Bachelor of Science in Environmental Science degree program. Work towards an understanding of the broader literature on a topic, identify hypothesis of interest, design an experiment to test the hypothesis, develop a budget, and write a research proposal. For each semester hour of credit earned, one lecture hour a week for one semester, with additional hours to be arranged as needed. Offered on the letter-grade basis only. Prerequisite: Upper-division standing, Biology 373, 373L, and Environmental Science 121, with a grade of at least C- in each.

# EVS 172D, 272D, 372D, 472D. Senior Research in Environmental Science.

Restricted to seniors pursuing the Bachelor of Science in Environmental Science degree. Continuation of Environmental Science 172C, 272C, 373C, or 472C. Perform proposed experiment, collect and analyze data, present results, and write a final report. For each semester hour of credit earned, one hour of field work and one and one-half laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Environmental Science 172C, 272C, 372C, or 472C with a grade of at least C- and consent of instructor.

## **Geological Sciences: GEO**

## **Lower-Division Courses**

## GEO 401 (TCCN: GEOL 1403). Physical Geology.

Registration priority given to environmental science and geological sciences majors. Nature, properties, and distribution of crustal materials; surficial processes; internal processes; origin of continents, oceans, and ocean basins; mineral and fuel resources. Three lecture hours and two hours of laboratory or fieldwork a week for one semester. Only one of the following may be counted: Geological Sciences 401, 303, 420H.

#### GEO 302C. Climate: Past, Present, and Future.

Designed for non-geological sciences majors. Principal factors that determine Earth's climate, evidence of climate change, causes of climate change, natural climatic variations and human-induced changes, prediction of climate in the next one hundred years, and uncertainties in climate prediction. Three lecture hours and one and one-half laboratory hours a week for one semester.

#### GEO 302D. Age of Dinosaurs.

An exploration of the general principles of natural history, focusing on the natural history of dinosaurs. An introduction to the basics of geology, anatomy, paleontology, and evolutionary theory, followed by the application of this knowledge, in tracing the evolutionary history of Dinosauria. Three lecture hours and one and one-half laboratory hours a week for one semester. Normally offered in the fall semester only. May not be counted toward a degree in environmental or geological sciences.

#### GEO 302E. Earth, Wind, and Fire.

Designed for non-geological sciences majors. Geologic phenomena that affect everyday life, including global warming, earthquakes, volcanism, desertification, river and coastline flooding and erosion, groundwater, mineral resources, and plate tectonics. Three lecture hours and one and one-half laboratory hours a week for one semester. Normally offered in the fall semester only. May not be counted toward a degree in environmental science or geological sciences.

#### GEO 302G. Earth Science and Sustainability.

Inquiry-based; explores grand challenges in earth science that affect sustainability and society, including climate change, energy production, soil erosion and agriculture, water availability, and natural hazards risk assessment and prediction. Activities include authentic data, simple models and maps used in geoscience gathering, and analysis and real-world application. The equivalent of three lecture hours a week for one semester. Geological Sciences 302K (Topic: Earth Science/ Sustainability) and 302G may not both be counted. Offered on the lettergrade basis only.

### GEO 302J. Crisis of Our Planet.

Designed for nonscience majors. Explores the interactions between humans and the Earth system by investigating the different time and spatial scales of the natural hazards that the planet presents, and exploring the societal and economic implications of civilizations coexisting with an evolving planet. Discussion of both long-term and punctuated catastrophic hazards, focusing on those from volcanoes, hurricanes, and earthquakes, using a combination of systems level exploration of the driving mechanisms as well as case histories. Discussion of issues related to risk, mitigation, and resilience for humans facing the vast array of natural hazards. Three lecture hours a week for one semester.

# GEO 302K (TCCN: GEOL 1301, GEOL 1302). Selected Topics in Geological Sciences.

Designed for nonscience majors. The impact of geological processes on human activity; geologic topics of popular interest. Three lecture hours and one and one-half laboratory hours a week for one semester. May not be counted toward a degree in environmental or geological sciences. May be repeated for credit when the topics vary.

#### GEO 302M. The Age of Mammals.

Introductory-level course on paleontology and natural history for nonscience majors. Basic geological processes, fossilization, and the fossil record. Overview of the "tree of life." Summary of the evolution and diversification of mammals, an introduction to interactions between physical and biological processes, and the impact of climate change and human activities on mammalian communities. Laboratory component focuses on the mammalian skeleton and common Texas mammals. Three lecture hours and one and one-half laboratory hours a week for one semester. Normally offered in the spring semester only. May not be counted toward a degree in environmental or geological sciences.

#### GEO 302P. Sustaining a Planet.

Restricted to freshmen and sophomores. Explores the interactions between humans and the Earth system by investigating the different time and spatial scales of the natural hazards that the planet presents, and exploring the societal and economic implications of civilizations co-existing with an evolving planet. Discussion of both long-term and punctuated catastrophic hazards, focusing on those from volcanoes, hurricanes, and earthquakes, using a combination of systems level exploration of the driving mechanisms as well as case histories. Discussion of issues related to risk, mitigation, and resilience for humans facing the vast array of natural hazards. Three lecture hours and one and one-half laboratory hours a week for one semester. Normally offered in the spring semester only. May not be counted toward a degree in geological sciences.

### GEO 303. Introduction to Geology.

Registration priority given to environmental science, geological sciences, and petroleum and geosystems engineering majors. Mineral and rock composition of the earth; measurement of geologic time; origin and evolution of life; earth's interior; plate tectonics; depositional environments and processes; ancient climates; humans, earth resources, and the environment. Two lecture hours and two laboratory hours a week for one semester. Only one of the following may be counted: Geological Sciences 401, 303, 420H.

#### GEO 303C. Introduction to the Solar System.

Examines the origin and evolution of our solar system; how processes such as volcanism and impacts have shaped planet surfaces, as well as the workings of planetary interiors; the unique properties of Earth that allowed life to arise and evolve; the prospects for seeking life on other planets in our own solar system and beyond; and the history of planetary exploration and the methods scientists use to explore fundamental questions regarding our place in the universe. Three lecture hours a week for one semester. Geological Sciences 303C and 310C (Topic: Introduction to the Solar System) may not both be counted. May not be counted towards a degree in environmental science, geological sciences, or geosystems engineering and hydrogeology.

## GEO 303E. Earth in 2100.

Restricted to non-geological science majors. Examination of the climate system and future impacts of human-induced climate change; discussion of possible mitigation strategies with a focus on energy resources. Participation in a carbon-reduction challenge. The equivalent of three lecture hours a week for one semester.

### GEO 405 (TCCN: GEOL 1404). Life through Time.

Restricted to freshmen and sophomores, with registration priority given to majors in the geological and environmental science degree plans. The history and development of life, and the processes of change from the early Precambrian era to the present. Three lecture hours and two laboratory hours a week for one semester. Geological Sciences 404C and 405 may not both be counted. Prerequisite: Geological Sciences 401, 303, or 420H with a grade of at least C-.

## GEO 305E. Energy and the Environment.

A survey of all forms of current and potential sources of energy, and how these might impact the earth's environment. Three lecture hours and one and one-half laboratory hours a week for one semester. May not be counted toward a degree in environmental science, geological sciences, or geosystems engineering and hydrogeology.

## GEO 306P. Geology and Sustainability.

Restricted to environmental science entry-level majors. Examines sustainability and environmental science from an interdisciplinary perspective. Three lecture hours and one and one-half laboratory hours a week for one semester. Normally offered in the fall semester. Prerequisite: Written consent of instructor.

## GEO 110C, 210C, 310C. Conference Course.

Supervised study of selected topics in geological sciences, by individual arrangement with the instructor. Conference course. May not be substituted for any required geological sciences course. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: Consent of instructor.

# GEO 110T, 210T, 310T. Undergraduate Topics in Geological Sciences.

Selected undergraduate topics in geological sciences. For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

### GEO 211. Emerging Scholars in Geological Sciences.

Introduction to research areas in the geological sciences, with emphasis on the skills needed for success in graduate school and the professional workplace. Four laboratory hours a week for one semester. Offered irregularly. May not be substituted for any required geological sciences course. Offered on the pass/fail basis only. Prerequisite: Consent of instructor.

## GEO 012N. JSG Geosciences Mentors Program - First-year.

Restricted to first-year students in the Jackson School of Geosciences. Introduction to the various geosciences disciplines and corresponding degree programs and research areas. Emphasis on the skills needed for success in graduate school and the professional workplace, such as interactive sessions with the Jackson School of Geosciences Career Center to address internships, career planning, and job search skills. One lecture hour a week for one semester. May not be counted toward a degree in geological sciences or environmental sciences. Offered on the pass/fail basis only. Prerequisite: Consent of instructor.

### GEO 114G. Geophysics Colloquium.

Open to non-geological sciences majors, but registration priority is given to geological sciences majors. Exploration of a variety of problems in modern geophysics. Two lecture hours a week for one semester, and at least one weekend field trip. Geological Sciences 110C (Topic: Geophysics Colloquium) and 114G may not both be counted. May be repeated for credit. Offered on the pass/fail basis only. Prerequisite: Consent of instructor.

## GEO 416K. Earth Materials.

Restricted to majors in the Jackson School of Geosciences; others may register with consent of instructor. Introduction to minerals, mineral study techniques, igneous and metamorphic rocks and ore deposits, and formation processes. Three lecture hours and four laboratory hours a week for one semester. Normally offered in the fall semester only. Prerequisite: The following with a grade of at least C- in each: Chemistry 301, 302, and Geological Sciences 401, 303, or 420H.

## GEO 416M. Sedimentary Rocks.

Restricted to majors in the Jackson School of Geosciences. Description and interpretation of sedimentary rocks in hand specimen and thin section; characteristics of sedimentary rocks deposited in different environments. Three lecture hours and four laboratory hours a week for one semester, with two additional one-day field trips to be arranged. Prerequisite: Geological Sciences 401, 303, or 420H with a grade of at least C-.

## GEO 316P. Sedimentary Rocks.

Registration priority given to petroleum and geosystems engineering majors and Energy and Management Certificate Program students. Examines the fundamentals of sedimentary rocks, including siliciclastic grain parameters and mineralogy, sediment transport and sedimentary structures; and carbonate mineralogy and geochemistry, grain and matrix constituents, modern facies, and classification. Reviews the principal siliciclastic and carbonate depositional systems, their process of formation and facies architecture and the role of process and architecture in petrophysical patterns, distribution of permeability and porosity, flow units, reservoir heterogeneities, and hydrocarbon recovery. Three lecture hours a week for one semester. Normally offered in the spring semester. May not be counted toward any degree in environmental science or geological sciences. Prerequisite: Geological Sciences 401, 303, or 420H with a grade of at least C-.

## GEO 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Geological Sciences.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad office. Credit is recorded as assigned by the study abroad adviser in the Department of Geological Sciences. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

## **Upper-Division Courses**

## GEO 420F. Classic Geology in Scotland.

Introduction to the founding concepts of geology. Students use advanced field technologies while studying the geology of Scotland on all scales of size. The equivalent of four lecture hours a week for one semester, including field exercises in a variety of geological settings. Prerequisite: Geological Sciences 303, 401 or 420H with a grade of at least C-.

## GEO 420H. Honors Introductory Geology.

Restricted to geological sciences and geosystems engineering and hydrogeology majors. An accelerated introductory course on the composition, structure, and history of the earth. Three lecture hours and two laboratory hours a week for one semester, and several all-day field trips. Normally offered in the fall semester only. Only one of the following may be counted: Geological Sciences 401, 303, 420H. Prerequisite: Consent of instructor.

### GEO 420K. Introduction to Field and Stratigraphic Methods.

Restricted to Jackson School of Geosciences majors. Field observation of geological processes and study of the mineralogy, petrology, stratigraphy, paleontology, and structural geology of central Texas. Two lecture hours and three laboratory hours a week for one semester, and six weekend field trips. Geological Sciences 420K and 320L may not both be counted. Prerequisite: For general geology majors: Geological Sciences 416K and 416M with a grade of at least C- in each, and credit or registration in Geological Sciences 426P with a grade of at least C-. For others: Geological Sciences 416K and 416M with a grade of at least C- in each.

### GEO 320L. Introductory Field Geology.

Designed for non-geological sciences majors. Study of geologic features and processes in the field; emphasizes regional geology of central Texas and techniques of geologic mapping. The equivalent of three lecture hours a week for one semester. Normally offered between the spring semester and the summer session only. Geological Sciences 420K and 320L may not both be counted. May not be counted toward a degree in environmental science, geological sciences, or geosystems engineering and hydrogeology. Offered on the pass/fail basis only. Prerequisite: One of the following with a grade of at least C-: Geological Sciences 401, 303, 420H.

## GEO 322J. Transitions in the History of Life.

Registration priority given to geological sciences majors. Introduction to major perturbations in the history of life; specifically mass extinctions and carbon-cycle perturbations (e.g. ocean anoxic events, hyper thermals, and acidification events). Addresses kill mechanisms (e.g. glaciations, impacts, large igneous provinces) and the subsequent environmental perturbations and ecological ramifications. Covers mass extinctions and C-cycle perturbations, and the environmental and paleobiological response to these events. Three lecture hours a week for one semester. Geological Sciences 322J and 371T (Topic: Transitions in the History of Life) may not both be counted. May be repeated for credit. Prerequisite: Upper-division standing; Geological Sciences 405 and 416M with a grade of at least C- in each.

## GEO 422K. Paleobiology.

Registration priority given to environmental science and geological sciences majors. Systematics, biostratigraphy, paleoecology, and evolution of fossil organisms. Three lecture hours and four laboratory hours a week for one semester, with two additional one-day field trips. Normally offered in the fall semester only. Prerequisite: Biology 311D, Geological Sciences 404C or 405, and 416M with a grade of at least C- in each.

# GEO 322S. Development and Evolution of the Vertebrate Skeleton.

Registration priority given to environmental science and geological sciences majors. Introduction to the organization and development of the vertebrate skeleton; survey of vertebrate history. Three lecture hours and two laboratory hours a week for one semester. Normally offered in the spring semester only, in alternate years. Prerequisite: Consent of instructor.

## GEO 022T. JSG Geosciences Mentors Program - Transfer.

Restricted to first semester transfer students in the Jackson School of Geosciences. Introduction to the various geosciences disciplines and corresponding degree programs and research areas. Emphasis on the skills needed for success in graduate school and the professional workplace, such as interactive sessions with the Jackson School of Geosciences Career Center to address internships, career planning, and job search skills. One lecture hour a week for one semester. May not be counted toward a degree in geological sciences or environmental sciences. Offered on the pass/fail basis only. Prerequisite: Consent of instructor.

## GEO 322V. Morphology of the Vertebrate Skeleton.

Identification of skeletal elements from the major vertebrate taxa, and aspects of skeletal functional morphology, with emphasis on extant taxa. Subjects include the skeletal systems of fish, amphibians, reptiles, birds, and mammals. Three lecture hours and four laboratory hours a week for one semester. Normally offered in the fall semester only, in alternate years. Geological Sciences 322V and 389R may not both be counted. Prerequisite: Biology 311C, Geological Sciences 404C or 405 with a grade of at least C-, and consent of instructor.

## GEO 325G. Computational Applications in the Geosciences.

Restricted to environmental science and geological sciences majors. An introduction to programming in MATLAB and applications to simulation

of physical processes and data analysis in the geosciences. Two lecture hours and two laboratory hours a week for one semester. Geological Sciences 325J and 325G may not both be counted. Offered on the letter-grade basis only. Prerequisite: Geological Sciences 303 or 401, Mathematics 408D or 408M, and Physics 301 or 303K.

## GEO 325J. Programming in FORTRAN and MATLAB.

Restricted to geological sciences majors. FORTRAN for students without knowledge of a computer programming language: survey of all variable types, loops, arrays, subroutines, and functions; overview of UNIX and MATLAB. Two lecture hours and two laboratory hours a week for one semester. Normally offered in the spring semester only. Geological Sciences 325J and 325G may not both be counted. Prerequisite: Mathematics 427J or 427K with a grade of at least C-.

### GEO 325K. Computational Methods.

Restricted to geological sciences majors. Sampling and aliasing. Review of sinusoids and wave terminology, complex numbers and complex sinusoids, vectors and matrices, the discrete Fourier transform, convolution, the convolution theorem, linear digital filters and transfer functions, random variable concepts and statistics, and least squares estimation. MATLAB is used for homework problems and examples. Two lecture hours and two laboratory hours a week for one semester. Normally offered in the fall semester only. Prerequisite: The following with a grade of at least C- in each: Geological Sciences 325J or 325G, Mathematics 427J or 427K, Physics 301 and 316 or 303K and 303L.

## GEO 325M. Numerical Modeling in the Geosciences.

Covers numerical solution of dynamical problems arising in the solid earth geosiences. Entails development of individual codes in Matlab and application of codes to understanding heat transfer, wave propagation, elastic, and viscous deformations. Requires familiarity with Matlab. Two lecture hours and two laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upper-division standing; Geological Sciences 325G, and Mathematics 427J and 427L with a grade of at least C-; or consent of instructor.

### GEO 426P. Igneous and Metamorphic Petrology.

Restricted to geological sciences majors. Mineralogy, geochemistry, and processes of magmatism and metamorphism. Three lecture hours and four laboratory hours a week for one semester. Normally offered in the spring semester only. Prerequisite: Geological Sciences 416K with a grade of at least C-; and registration or a grade of at least C- in either Physics 301 and 101L, or 303K and 103M.

# GEO 327G. Geographic Information System and Global Positioning System Applications in Earth Sciences.

Restricted to environmental science and geological sciences majors. Theory and practice of geographic information system (GIS) and Global Positioning System (GPS) technologies, and their applications to problems in earth sciences. Laboratories and field trips provide handson experience with the collection, mapping, and analysis of geologic and other field data using GPS equipment and GIS software. Topics include map projections; datums and reference frames; cartographic principles; remotely sensed data (satellite and aerial photos, image radar); vectorand raster-based image formats; geospatial data resources; GIS software applications; surveying principles; GPS constellation and data structure; differential GPS; data logging schemes; GPS postprocessing software; integration of GPS and GIS in mapmaking; extant GIS applications in geology and hydrogeology. Three lecture hours and two laboratory hours a week for one semester, and two weekend field trips. Geological Sciences 327G and 371C (Topic: Geographic Information System and Global Positioning System Applications in Earth Sciences) may not both

be counted. Prerequisite: Geological Sciences 420K with a grade of at least C-.

## GEO 428. Structural Geology.

Restricted to geological sciences majors. Description, classification, and origin of Earth structures. Solution of problems by descriptive geometry, geologic maps, and contouring. Three lecture hours and three laboratory hours a week for one semester. Normally offered in the fall semester only. Prerequisite: The following with a grade of at least C-: Geological Sciences 420K; Mathematics 408C or 408L; and Physics 301 and 101L, or 303K and 103M.

## GEO 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Geological Sciences.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Geological Sciences. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

# GEO 329W. Hydrogeology Cooperative (Geological Sciences).

Restricted to environmental science and geological sciences majors. Covers the work period of geological sciences students in the Cooperative Education program, which provides supervised work experience by arrangement with the employer and the supervising instructor. Required submission of a final report to the supervising instructor at the conclusion of the program. Forty laboratory hours a week for one semester. The student must repeat the course each work period and must take it twice to receive credit toward the degree; at least one of these registrations must be during a long-session semester. No more than three semester hours may be counted toward the major requirement; no more than six semester hours may be counted toward the degree. The student's first registration must be on the pass/fail basis. May be repeated for credit. Prerequisite: Application to become a member of the Hydrogeology Cooperative (Geological Sciences) Program, and consent of the Associate Dean for Academic Affairs.

## GEO 330K. Energy Exploration.

Registration priority given to environmental science and geological sciences majors. Covers the fundamental elements of the petroleum system, including the origin of source rocks and reservoirs, rock properties, migration of hydrocarbons, and correlation methods for rock formations. During the final weeks of the course, students form exploration teams and work up real subsurface data from the Gulf of Mexico in order to participate in a simulated lease sale. Two lecture hours and two laboratory hours a week for one semester. Normally offered in the spring semester. Prerequisite: The following with a grade of at least C- in each: Geological Sciences 416M; and Physics 303L and 103N, or Physics 316 and 116L.

## GEO 331K. Petrology and Plate Tectonics.

Registration priority given to environmental science and geological sciences majors. Sedimentation, metamorphism, igneous activity, and deformation patterns at rift zones, subduction zones, and transform margins. Three lecture hours a week for one semester. Offered irregularly, as shown in the Course Schedule. Prerequisite: Geological Sciences 428 with a grade of at least C-.

## GEO 335. Geology and Mineral Resources of Texas.

Geologic history of the region; local rocks, fossils, and mineral resources; influence of physiography, surface and subsurface water supplies, and energy and mineral resource production on the state economy. Three lecture hours and two laboratory hours a week for one semester. May not be counted toward the Bachelor of Science in Geological Sciences: Option I (General Geology), Option II (Geophysics), or Option III (Hydrogeology). Prerequisite: The following with a grade of at least C-: Geological Sciences 401, 303, or 420H; and 405.

## GEO 338J. Marine Geology.

Restricted to students with a major in the Jackson School of Geosciences. Priority given to geological sciences majors. A survey of the field of marine geology by exploring the structure and evolution of the ocean basins, oceanic islands, and island arcs, the chemistry of the oceans, the sediments in the marine environments, the products and processes of the land-air-sea interface, and the history of the oceans over geologic time. The equivalent of three lecture hours a week for one semester. Offered in the fall semester only. Offered in alternate years. Geological Sciences 338J and 371C (Topic: Marine Geology) may not both be counted. Prerequisite: Upper-division standing.

### GEO 338T. Marine Tectonics.

Restricted to geological sciences majors. Tectonic processes within the dynamic Earth, with a focus on oceanic structures. Subjects may include fundamentals of plate tectonics; plate motion, driving forces, and mantle convection; evolution of triple junction and plate margins; plate reconstructions; earthquakes and focal mechanisms; structure and geochemistry of the Earth's interior; mantle structure and tomography; rheology and deformation mechanisms in mantle and crust; heat flow, gravity, the geoid, and paleomagnetism; hotspots and mantle plumes; seafloor spreading and oceanic spreading ridges; oceanic transform faults and fracture zones; and subduction zones, volcanic island arcs, and marginal seas. Three lecture hours a week for one semester. Normally offered in the spring semester only. Only one of the following may be counted: Geological Sciences 338T, 371C (Topic: Tectonics I), 381T, 391 (Topic: Tectonics I). May not be substituted for any required geological sciences course. Prerequisite: Geological Sciences 428 with a grade of at least C-.

## GEO 339T. Continental Tectonics.

Registration priority given to geological sciences majors. Tectonic processes, with a focus on continental lithospheric structures. Subjects may include convergent margins, subduction zones, magmatic arcs, and foreland structures; collisional orogenesis, arc-continent collisions, continent-continent collision, and mountain building; formation of supercontinents; uplift and exhumation; orogenic collapse and extensional tectonics; continental rifting and passive margins; transform margins; and the effect of tectonics on climate and oceanic circulation. Three lecture hours a week for one semester. Normally offered in the fall semester only. Only one of the following may be counted: Geological Sciences 339T, 371C (Topic: Tectonics II), 382T, 391 (Topic: Tectonics II). May not be substituted for any required geological sciences course. Prerequisite: For geological sciences majors, Geological Sciences 428 with a grade of at least C-; for others, consent of instructor.

## GEO 340T. Geoclimatology.

Restricted to majors in the Jackson School of Geosciences. Examination of the climate records encoded in sedimentary archives through geologic time. Three lecture hours a week for one semester. Geological Sciences 340T and 371C (Topic: Geoclimatology) may not both be counted. May not be substituted for any required geological sciences course. Prerequisite: Chemistry 302, Geological Sciences 416K, and 416M with a grade of at least C- in each.

### GEO 341. Mineral Resources, Society, and the Environment.

Registration priority given to majors in the Jackson School of Geosciences. Nature and origin of mineral resources; their discovery, extraction, and uses; and their relationship to global history, economics, and the environment. Three lecture hours and one laboratory hour a week for one semester. Normally offered in the spring semester only. Prerequisite: Geological Sciences 416K with a grade of at least C-.

#### GEO 341F. Microstructures and Rock Rheology.

Focuses on processes of deformation operative in the crust and upper mantle, with an emphasis on distinguishing these processes using microstructural analysis and describing them using basic constitutive relationships from rock mechanics. Three lecture hours a week for one semester. Prerequisite: Geological Sciences 428 with a grade of B or higher.

## GEO 341G. Geomicrobiology.

Registration priority given to majors in the Jackson School of Geosciences. Geologic and hydrologic controls on subsurface microbial growth, metabolism, and community structure; the geochemical consequences of microbial processes in subsurface settings; and the influence of geology on microbial ecology. Three lecture hours a week for one semester. Normally offered in the fall semester only, in alternate years. Geological Sciences 341G and 381G may not both be counted. May not be substituted for any required geological sciences course. Prerequisite: For geological sciences majors, upper-division standing; for others, upper-division standing and consent of instructor.

# GEO 343Q. Fundamentals and Applications of Inductively Coupled Plasma Mass Spectrometry.

Restricted to Jackson School of Geosciences majors. Explores inductively coupled plasma mass spectrometry (ICP-MS) for trace, minor and major element measurement, and applications in analytical fields. Discussion of fundamentals of technique, applications, and capabilities of ICP-MS through hands-on lab experience. Two lecture hours and oneand-one-half lab hours per week for one semester. Geological Sciences 343Q and 371C (Topic: Fundamentals and Applications of ICP-MS) may not both be counted. Prerequisite: Upper-division standing.

#### GEO 344K. Marine Mining and Minerals.

Same as Marine Science 344K. Overview of seafloor mineral deposits, their exploration, and mining. Three lecture hours a week for one semester. May not be counted toward the Bachelor of Science in Geological Sciences or the Bachelor of Science in Environmental Sciences degrees. Prerequisite: Geological Sciences 401 or 303, 416K, and 416M.

### GEO 344U. Quantitative Seismic Interpretation.

Restricted to students in the Jackson School of Geosciences. Seismic inversion, a tool for reservoir characterization, post- and pre-stack modeling, rock physics and fluid replacement modeling, wavelet estimation and post-stack inversion, AVO and pre-stack inversion, multiattribute regression and neural network, and net pay estimation. Extensive hands-on training with three-dimensional seismic and well-log data. Three lecture hours a week for one semester. Prerequisite: Upperdivision standing.

### GEO 145E. Professional Ethics in Geosciences.

Registration priority is given to majors in the Jackson School of Geosciences. Supervised study devoted to the subject of professional ethics and personal integrity in the sciences, with specific subject matter designed to evolve with the science and our society. One lecture hour a week for one semester. Normally offered in the fall semester only. Geological Sciences 145E and 171C (Topic: Professional Ethics in Geosciences) may not both be counted. May not be substituted for any required geological sciences or environmental sciences course. Offered on the letter-grade basis only. Prerequisite: For non-Jackson School of Geosciences majors, consent of instructor.

# GEO 346C. Introduction to Physical and Chemical Hydrogeology.

Registration priority given to environmental science and geological sciences majors. Basic concepts of fluid flow, surface and subsurface hydrology, aqueous geochemistry, and fluid-rock interaction. Additional subjects include isotope hydrogeology, evolution of seawater, and mineral-solution equilibrium. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Chemistry 302 with a grade of at least C-.

#### GEO 347D. Global Warming.

Discussion of the fundamental sciences of global warming, including an active investigation of contemporary climate change issues. Three lecture hours a week for one semester. Normally offered in the fall semester only. Geological Sciences 347D and 371C (Topic: Global Warming) may not both be counted. Offered on the letter-grade basis only. Prerequisite: Upper-division standing.

#### GEO 347G. Climate System Modeling.

Studies the basic theory of climate system modeling using state-ofthe-art regional climate models in a variety of applications. Subjects may include paleoclimate study and future climate prediction based on greenhouse gas increases. Students are expected to have a basic knowledge of UNIX and programming experience in FORTRAN. Three lecture hours a week for one semester. Normally offered in the spring semester only. Only one of the following maybe counted: Geological Sciences 347G, 371C (Topic: Climate System Modeling), 387G, 391 (Topic: Climate System Modeling). May not be substituted for any required geological sciences course. Prerequisite: Upper-division standing.

#### GEO 347K. Gems and Gem Minerals.

Crystallography, occurrence, and identification of gem minerals and materials; artificial gems; simple cutting and polishing; history of gems and gemology. Three lecture hours and two laboratory hours a week for one semester. May not be counted toward a degree in environmental science or geological sciences. Prerequisite: One of the following with a grade of at least C-: Geological Sciences 303, 401, or 420H.

### GEO 347P. Climate System Physics.

Discussion of first-order principles and processes that govern the thermodynamical structure and energy distribution of the atmosphere, ocean, land, and cryosphere and their interaction with the dynamic aspect of the climate system. Three lecture hours a week for one semester. Normally offered in the spring semester only. Only one of the following may be counted: Geological Sciences 347P, 371C (Topic: Climate System Physics), 387P, 391 (Topic: Climate System Physics). May not be substituted for any required geological sciences course. Prerequisite: Upper-division standing, Mathematics 408D or 408M, and Physics 303K with a grade of at least C- in each.

#### GEO 348K. Marine Geology and Geophysics Field Course.

Hands-on, team-based instruction in the collection and processing of marine geological and geophysical data along the Gulf of Mexico coast. For Marine Science 148, one lecture hour and one laboratory hour a week for one semester. For Geological Sciences 348K and Marine Science 348, one lecture hour and four laboratory hours a week for one semester with additional hours to be arranged. Only one of the following may be counted: Geological Sciences 348K, 397F, Marine Science 348 (Topic 2). Fulfills the field experience requirement for some geological sciences degree programs. Students should contact the Department of Geological Sciences before registering. Prerequisite: For geological sciences majors, Geological Sciences 420K or 320L with a grade of at least C-, and consent of instructor; Geological Sciences 416M and 465K are recommended; for others, Marine Science 307 and 354F with a grade of at least C- in each, and consent of instructor.

## GEO 348P. Field Methods in Planetary Geology.

Restricted to geological sciences majors. Field studies combined with remote sensing to support studies of remote imagery from planetary missions. Two lecture hours and two laboratory hours a week for one semester. Three week field trip to the Southwestern United States also required. May not be substituted for any required geological sciences course. Geological Sciences 348P and 371C (Topic: Field Methods Planetary Geology) may not both be counted. Prerequisite: Upper-division standing and consent of instructor.

## GEO 349C. Introduction to the Cryosphere.

Restricted to students with a major in the Jackson School of Geosciences. A survey of the crysopheric sciences. The equivalent of three lecture hours a week for one semester. Normally offered in the fall semester only. Geological Sciences 349C and 371T (Topic: Introduction to the Cryosphere) may not both be counted. Prerequisite: Upper-division standing, and the following with a grade of at least C- in each: Chemistry 204; Geological Sciences 401 or 303; Mathematics 408D or 408M; and Physics 303L and 103N, or 316 and 116L.

## GEO 350D. Ice Dynamics.

Physics of ice motion, basal processes, glacial hydrology, and unstable flow. The equivalent of three lecture hours a week for one semester. Normally offered in the fall semester only. Offered in alternate years. Geological Sciences 350D and 371C (Topic: Glaciology) may not both be counted. Prerequisite: Upper-division standing, and the following with a grade of at least C-: Chemistry 204; Geological Sciences 401 or 303, and 349C; Mathematics 408D or 408M; and Physics 303L and 103N, or 316 and 116L.

## GEO 354. Physics of Earth.

Registration priority given to geophysics majors. Examines the kinematics and dynamics of the solid Earth as well as its evolution through time. Observations from multiple geophysical techniques are reviewed and applied towards understanding the planet. Three lecture hours a week for one semester. Normally offered in the spring semester only. Geological Sciences 354 and 384D may not both be counted. Prerequisite: The following with a grade of at least C-: Geological Sciences 465K, Mathematics 427J or 427K, and Physics 315 and 115L.

### GEO 355G. Geodynamics of the Lithosphere and Mantle.

Explores continuum dynamics problems that can serve to form a physical understanding of the tectonic and convective processes that shape our planet. Geared toward all undergraduate majors and graduate students from the Earth sciences and related fields in the natural sciences including physics, computer science, and engineering. The equivalent of two lecture hours and one-and-one-half laboratory hours a week for one semester. Geological Sciences 355G and 371T (Topic: Geodynamics) may not both be counted. Offered on the letter-grade basis only. Prerequisite: Upper-division standing; Geological Sciences 401 or 303 with a grade of at least C-; or consent of instructor.

## GEO 358K. Volcanology.

Registration priority given to majors in the Jackson School of Geosciences. Ash deposits, lava flows, eruption processes; prediction and mitigation of volcanic hazards. Three lecture hours and one laboratory hour a week for one semester. Offered irregularly. Prerequisite: Geological Sciences 426P with a grade of at least C-.

## GEO 660. Field Geology.

Restricted to geological sciences majors. Methods of geologic mapping with topographic maps and aerial photographs. Field studies

include measuring sections, interpretation of stratigraphy, structure, environments of deposition of various sedimentary rocks, and the origin and petrology of igneous and metamorphic rocks. Students must register for this course during the first summer registration period. Given for six weeks each summer in Colorado, New Mexico, and other western states. Normally offered in the summer session only. Prerequisite: Geological Sciences 420K and 428 with a grade of at least C- in each.

# GEO 360G. Construction and Interpretations of 3-D Stratigraphy.

Restricted to students with a major in the Jackson School of Geosciences. From Earth surface to subsurface, examines threedimensional volumes of basin-filling stratigraphy to explore how depositional landscapes are preserved in the sedimentary record and how sedimentary deposits can be analyzed to produce quantitative reconstructions of past environmental states. Data includes both laboratory and industry-grade volumes of stratigraphy. Intended for Earth scientists requiring a quantitative understanding of how the structure of depositional landscapes is translated into subsurface stratigraphy. The equivalent of three lecture hours and one laboratory hour a week for one semester. Normally offered in the fall semester only. Geological Sciences 360G and 371C (Topic: Construction and Interpretation of 3-D Stratigraphy) may not both be counted. May not be substituted for any required geological sciences or environmental sciences course. Prerequisite: Upper-division standing.

## GEO 661. Geophysics Field Camp.

Restricted to geophysics majors. Field studies for geophysics majors, including seismic, magnetic, electrical, gravity, and other techniques; related data processing and interpretation. Each half requires three consecutive weeks of fieldwork. Geological Sciences 661A is offered either between the spring semester and the summer session or in the summer session; Geological Sciences 661B is offered in the summer session. Students may take Geological Sciences 661 for University credit while enrolled in the Los Alamos National Laboratory SAGE program. May be used in place of Geological Sciences 660 to fulfill the requirements for the Bachelor of Science in Geological Sciences (Option II: Geophysics). Prerequisite: Geological Sciences 420K, 465K, and 365P with a grade of at least C- in each.

## GEO 364P. Physical Oceanography.

Basic concepts for understanding and describing the large-scale circulation of the ocean. Covers measurement methods, properties of seawater, description of the global ocean's mean state and variability, introductory dynamics including balanced motions, wind-driven and abyssal circulation, wave motions, air-sea interactions, sea level science, and the ocean's role in climate. Three lecture hours a week for one semester. Geological Sciences 364P and 371T (Topic: Physical Oceanography) may not both be counted. May not be substituted for any required geological sciences course. Offered on the letter-grade basis only. Prerequisite: Upper-division standing and consent of instructor.

## GEO 465K. Seismic Exploration.

Registration priority given to geophysics majors. Seismic theory, including body and surface waves, attenuation, rays, reflection and transmission coefficients, principles of synthetic seismogram calculations, seismic imaging principles, reflection data processing methods, rock physics overview, seismic attributes overview, and seismic exploration field methods. Three lecture hours and two laboratory hours a week for one semester. Normally offered in the fall semester only. Prerequisite: Mathematics 427L, Physics 315, and 115L with a grade of at least C-.

#### GEO 365N. Seismic Data Processing.

Restricted to students with a major in the Jackson School of Geosciences; registration priority given to geophysics majors. Reduction of seismic data from field records to final geologic images, using real data sets and open-source data analysis software. Two lecture hours and two laboratory hours a week for one semester. Normally offered in the spring semester only. Prerequisite: Upper-division standing, and Geological Sciences 325K and 465K with a grade of at least C- in each.

#### GEO 365P. Potential Field Applications in Geophysics.

Registration priority given to geophysics majors. Introduction to the theory, measurement, and application of gravity and magnetic and electric fields to exploration and global-scale problems. Three lecture hours a week for one semester. Normally offered in the spring semester only. Prerequisite: The following with a grade of at least C-: Mathematics 427J or 427K, 427L, and Physics 315 and 115L.

## GEO 365Q. Geomorphology Process and Form.

Registration priority given to majors in the Jackson School of Geosciences. Explores how Earth surface processes combine to shape landscapes through erosion and deposition. Includes discussion of open channel flow, sediment transport, fluvial and hillslope processes, and tectonic controls on landscape evolution. Three lecture hours a week for one semester, with several field trips to be arranged. Normally offered in the fall semester. Only one of the following may be counted: Geological Sciences 365Q, 371C (Topic: Geomorphology: Landscape Process, Form, and Evolution), 385Q, 391 (Topic: Geomorphology: Landscape Process, Form, and Evolution). May not be substituted for any required geological sciences course. Prerequisite: Upper-division standing, and Mathematics 408C or 408L with a grade of at least C-.

#### GEO 366M. Mathematical Methods in Geophysics.

Registration priority given to geophysics majors. A survey of mathematics for geoscientists that includes infinite series, complex variables, linear algebra, integral transforms, ordinary and partial differential equations, tensor analysis, and probability and statistics. Three lecture hours a week for one semester. Normally offered in the fall semester. Geological Sciences 366M and 380J may not both be counted. Prerequisite: Mathematics 427L with a grade of at least C-.

### GEO 366P. Planetary Geology and Geophysics.

Introduction to planetary geology, with an emphasis on geophysical observations of terrestrial planets in our solar system. Discussion of missions, instruments, and techniques, and incorporation of mission data in student projects. Includes field trip to study planetary analog sites. The equivalent of three lecture hours a week for one semester. Geological Sciences 366P and 371C (Topic: Planetary Geology & Geophysics) may not both be counted. Offered on the letter-grade basis only. Prerequisite: Upper-division standing and consent of instructor.

#### GEO 367M. Morphodynamics and Quantitative Stratigraphy.

Explores development of numerical tools to quantitatively understand sediment transport and stratigraphic development in sedimentary basins. Focus on applications of principles in fluid mechanics, sediment transport, and depositional mechanics to one-dimensional and quasitwo dimensional numerical modeling of sediment morphodynamics in depositional settings such as river deltas, carbonate platforms, and submarine fans. Requires development of geometrical and morphodynamic models as research tools to understand gathered data. Three lecture hours per week for one semester. Geological Sciences 367M and 371T (Topic: Morphodynamics and Quantitative Stratigraphy) may not both be counted. Prerequisite: Geological Sciences 416M with a grade of at least C-.

## GEO 468K. Geophysics for Geological Sciences Majors.

Registration priority given to majors in the Jackson School of Geosciences. A survey of seismic, magnetic, gravitational, and other geophysical tools and their application to exploration and global-scale problems. Three lecture hours and two laboratory hours a week for one semester. Normally offered in the spring semester only. May not be counted toward the Bachelor of Science in Geological Sciences, Option II: Geophysics. Prerequisite: Mathematics 408D; and Physics 303L and 103N, or 316 and 116L with a grade of at least C- in each.

## GEO 369E. Evolution of Reef Ecosystems.

Introduction to the variety of reef ecosystems throughout the geological record as well as the environmental and evolutionary factors that controlled reef expansion and collapse. Study of evolving ocean chemistry, how organisms biomineralize a skeleton, symbiosis, ecology, mass extinctions, and both current and future threats to reef health. Three lecture hours a week for one semester. Geological Sciences 369E and 371T (Topic: Evolution of Reef Ecosystems) may not both be counted. Prerequisite: Upper-division standing; Geology 405 and 416M, or consent of instructor.

#### GEO 370K. Sedimentology.

Registration priority given to majors in the Jackson School of Geosciences. Processes of sediment formation, transportation, and deposition; textures, structures, and facies of sedimentary rocks. Three lecture hours a week for one semester, and two one-day field trips. Offered irregularly. Prerequisite: Geological Sciences 420K with a grade of at least C-.

### GEO 171C, 271C, 371C. Conference Course.

Restricted to majors in the Jackson School of Geosciences. Supervised study of selected topics in geological sciences, by individual arrangement with the department and instructor. Conference course. May not be substituted for any required geological sciences course. May be repeated for credit when the topics vary. Prerequisite: Consent of instructor.

#### GEO 171H. Honors Research Methods I.

Restricted to students in the Geological Sciences Honors Program. Preparation for independent research projects through exposure to current research programs, facilities, personnel, and projects in the Jackson School of Geosciences. Includes selecting research topics, mentors, and supervisors; preparing research proposals; conducting research activities; and presenting research results. One lecture hour a week for one semester.

#### GEO 371S. Geological Sciences Research Methods.

Restricted to geological sciences majors. Supervised research project completed in collaboration with faculty supervisor and related research group members either as a one-semester research activity in preparation for a senior thesis project. Three lecture hours a week for one semester, with additional hours to be arranged. Offered on the letter-grade basis only. Prerequisite: Upper-division standing; Geological Sciences 416K, 416M, and 420K with a grade of at least C-.

# GEO 171T, 271T, 371T, 471T, 571T, 671T. Undergraduate Seminar in Geological Sciences.

Registration priority is given to majors in the Jackson School of Geosciences. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester; additional hours may be required for some topics. May not be substituted for any required geological sciences courses. May be repeated for credit when the topics vary. Upper-division standing and consent of instructor; additional prerequisites may vary with the topic.

### GEO 172H. Honors Research Methods II.

Restricted to students in the Geological Sciences Honors Program. Preparation for independent research projects through exposure to current research programs, facilities, personnel, and projects in the Jackson School of Geosciences. Includes selecting research topics, mentors, and supervisors; preparing research proposals; conducting research activities; and presenting research results. One lecture hour a week for one semester. Prerequisite: Geological Sciences 171H with a grade of at least B-.

# GEO 372S. Geochemical Problem Solving with Atoms and lons.

Discussion of mass spectrometers, which are analytical balances that operate at molecular and atomic levels, used for gathering compositional data (both isotopic and elemental). Explores conversion of sample molecules into charged particles (ions), and measurement according to mass-to-charge ratio to assess chemical identity and abundance. Introduction to inorganic mass spectrometry methods and applications to the Earth sciences, surveying key modalities: TIMS, ICP-MS, LA-ICP-MS, MC-ICP-MS, and IRMS. Examines techniques in generating and critically evaluating high-quality data, and research. Two lecture hours and three lab hours per week for one semester. Geological Sciences 372S and 371T (Topic: Geochemical Problem Solving with Atoms and lons) may not both be counted. Prerequisite: Upper-division standing and consent of instructor.

### GEO 173H. Honors Research Methods III.

Restricted to students in the Geological Sciences Honors Program. Preparation for independent research projects through exposure to current research programs, facilities, personnel, and projects in the Jackson School of Geosciences. Includes selecting research topics, mentors, and supervisors; preparing research proposals; conducting research activities; and presenting research results. One lecture hour a week for one semester. Prerequisite: Geological Sciences 171H and 172H with a grade of at least B- in each.

### GEO 376C. Isotope Geology.

Overview of the principles of stable and radiogenic isotope geochemistry. Subjects include mass spectrometry, geochronology and thermochronology, cosmogenic nuclides, radiogenic geochemistry, isotopic fractionation, traditional and non-traditional stable isotope geochemistry and its applications to the hydrologic cycle, lowtemperature geochemistry, magmatic and metamorphic processes, thermometry, fluid-rock interactions, tectonics, crust-mantle evolution, and extraterrestrial materials. Three lecture hours a week for one semester. Only one of the following may be counted: Geological Sciences 371C (Topic: Isotope and Environmental Geology Research), 376C, 388L. Prerequisite: Chemistry 302, and Mathematics 408D or 408M with a grade of at least C- in each, and consent of instructor.

### GEO 376E. Environmental Isotope Geochemistry.

Restricted to majors in the Jackson School of Geosciences. The application of the isotope and trace element geochemistry of natural waters and sediments to studies of the hydrologic cycle. Stable, radiogenic, and cosmogenic isotopes are used as tracers of the evolution of groundwater, surface water, and ocean water. Three lecture hours a week for one semester, with additional laboratory hours to be arranged. Offered irregularly. Prerequisite: The following with a grade of at least C-: Chemistry 302, 204, Geological Sciences 416K, 416M, 346C, Mathematics 408D or 408M, and Physics 303L and 103N.

## GEO 476K. Groundwater Hydrology.

Registration priority given to majors in the Jackson School of Geosciences. Introduction to subsurface hydrology, emphasizing geological controls on groundwater flow; quantitative methods of analyzing aquifer systems; regional hydrology; water quality and pollution. Three lecture hours and one laboratory hour a week for one semester, with several local field trips. Normally offered in the fall semester only. Prerequisite: Geological Sciences 346C, Mathematics 408D, or 408M with a grade of at least C-.

## GEO 376L. Field Methods in Groundwater Hydrology.

Registration priority given to hydrogeology majors. Introduction to field methods, including geophysics, pump tests, stream gauging, welllogging, water sampling, and mapping. Students must register for this course during the first summer registration period. An intensive threeweek course meeting eight hours a day, Monday through Friday, and four hours on Saturday: lectures, laboratory exercises, and field exercises; nightly homework involving map exercises, reduction of field data, report preparation; Saturdays devoted to report presentation, review sessions, and local field trips. Offered between the spring semester and the summer session. Prerequisite: Geological Sciences 476K with a grade of at least C-.

## GEO 476M. Aqueous Geochemistry.

Registration priority given to environmental science and geological sciences option III majors (hydrogeology). An introduction to aqueous geochemistry and contaminant hydrogeochemistry; topics include basic thermodynamics, kinetics, rock-water interactions, and solute transport. Three lecture hours and two laboratory hours a week for one semester. Normally offered in the spring semester only. Prerequisite: Geological Sciences 346C, 476K, or 376S with a grade of at least C-.

## GEO 376S. Physical Hydrology.

Registration priority given to environmental science and hydrogeology majors. Modern conceptual and methodological approaches to hydrological science: qualitative assessment of hydrological processes, quantitative representation, approaches to measurement, and treatment of uncertainty. Major components of the hydrological cycle: precipitation, snow and snowmelt, infiltration, soil moisture, evapotranspiration, and runoff and their link to the coupled-earth system. Three lecture hours a week for one semester. Normally offered in the fall semester only. Prerequisite: Geological Sciences 346C, or Mathematics 408D or 408M with a grade of at least C-.

### GEO 376T. High-Temperature Geochemistry.

Restricted to majors in the Jackson School of Geosciences. Study of the composition, origin, and chemical and physical evolution of the earth and its interior. Examines the links between the fields of geochemistry and tectonics, igneous petrology, geophysics, and other areas of inquiry. Three lecture hours a week for one semester. Normally offered in the fall semester only. Prerequisite: Mathematics 408D or 408M with a grade of at least C-.

### GEO 476W. Hydrogeophysics.

Application of geophysical methods in hydrogeology. Modules include method theory and hydrogeological applications; using instruments in the field; and analysis of data, interpretation, and hydrogeological insights. Class discussions; field exercises and written field exercise summaries; individual and group reports. Previous coursework and/ or experience in hydrogeology and geophysics is recommended. The equivalent of four lecture hours a week for one semester, with field work hours to be arranged. Normally offered in the fall semester only. Only one of the following may be counted: Geological Sciences 371C (Topic: Hydrogeophysics), 476W, 382W, 391 (Topic: Hydrogeophysics). May not be substituted for any required geological sciences course. Prerequisite: Consent of instructor.

## GEO 377K. Applied Karst Hydrogeology.

Registration priority given to hydrogeology majors. The study of karst landforms, processes, flow systems, and water resources. Geologic controls, natural resources, aquifer recharge and discharge, system evolution, geochemistry/water quality, tracing methodologies, geophysical methods, and modeling are covered with an emphasis on collecting and interpreting field data. Three lecture hours a week for one semester, with additional fieldwork hours to be arranged. Normally offered in the spring semester only. Course fulfills three hours of field course requirement for Bachelor of Science in Geological Sciences (Option III: Hydrogeology) degree program. Only one of the following may be counted: Geological Sciences 371C (Topic: Applied Karst Hydrogeology), 377K, 391 (Topic: Applied Karst Hydrogeology), 391K. Prerequisite: Geological Sciences 476K with a grade of at least C-.

## GEO 377P. Physical Climatology.

Investigates the nature of earth's climate and examines the physical processes that maintain the climate system. Three lecture hours and two laboratory hours a week for one semester. Prerequisite: Upper-division standing, Computer Science 303E, Geography 301K, Mathematics 408D or 408M, and Physics 303K with a grade of at least C- in each.

### GEO 679G. Special Studies in Geophysics.

Restricted to geophysics majors. Special research projects, field studies, or geophysical/industrial internship. Assigned reading with written and oral report. Three lecture hours a week for two semesters. May be used instead of Geological Sciences 660 in fulfilling the requirements for the Bachelor of Science in Geological Sciences (Option II: Geophysics). Prerequisite: Consent of instructor.

### GEO 379H. Honors Thesis in Geological Sciences.

Restricted to students in the Geological Sciences Honors Program. Supervised research project resulting in an honors thesis with an oral defense. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May be counted as three of the six geological sciences senior elective hours. Prerequisite: Geological Sciences 171H, 172H, and 173H with a grade of at least B- in each.

### GEO 679J. Internship in Hydrogeology.

Restricted to hydrogeology majors. Special hydrogeological studies under the joint supervision of industry professionals and faculty members. Students present a written report. Forty hours a week for one semester. May be used in place of Geological Sciences 660 in fulfilling the requirements for the Bachelor of Science in Geological Sciences (Option III: Hydrogeology). Prerequisite: Geological Sciences 476K with a grade of at least C-, and consent of instructor.

# GEO 279K, 379K. Special Studies in Advanced Geological Sciences.

Special emphasis on recent developments in geosciences. Conference course. May be repeated for credit when the topics vary. Prerequisite: Consent of instructor.

## GEO 479M. Mammalogy.

Surveys the biology and evolutionary history of mammals. Introduction to the diversity of living mammals through the study of mammalian ecology, behavior, morphology, and taxonomy. Laboratory work focuses on the characters diagnosing the major mammalian clades and identifying the common recent mammals of Texas using skins and recent osteological specimens. Fossils and the fossil record of mammals. Three lecture hours and three laboratory hours a week for one semester. Normally offered in the spring semester only. Prerequisite: Upper-division standing in biology, geological sciences, or anthropology.

#### GEO 679N. Geosciences Internship.

Restricted to geological sciences majors. Work experience in geological sciences under the joint supervision of industry professionals (the employer) and a supervising faculty member. Requires submission of a final report to the supervising faculty member at the end of the semester. Internship position must be on file with JSG Career Services. Forty laboratory hours a week. Offered on the letter-grade basis only. Prerequisite: Geological Sciences 420K and 428 with at least a C- in each, and consent of instructor.

## GEO 379S. Geological Sciences Senior Thesis.

Restricted to geological sciences majors. Second course in a two-course sequence focused on supervised student research and preparation of a final report on research activities. Three lecture hours a week for one semester, with additional hours to be arranged. Offered on the letter-grade basis only. Prerequisite: Upper-division standing, and Geological Sciences 371S with a grade of at least C-.

# School of Information

Eric T. Meyer, PhD, Dean Philip Doty, PhD, Associate Dean Mary Carla Criner, PhD, Assistant Dean http://www.ischool.utexas.edu/

## General Information

The School of Information offers the Master of Science in Information Studies, the Master of Science in Identity Management and Security, and the Doctor of Philosophy. The Graduate Catalog (http:// catalog.utexas.edu/graduate/fields-of-study/information) provides information about these programs and the requirements for admission to graduate study.

In addition to the graduate courses described in the Graduate Catalog (http://catalog.utexas.edu/graduate/fields-of-study/information), the faculty has approval to offer undergraduate courses in the academic years 2018-2019 and 2019-2020. For undergraduates who are interested in a thorough introduction to information studies, the School of Information offers a Minor in Information Studies consisting of at least five three credit-hour courses, including one required course (Information Studies 304D) and at least six upper-division credits, for a total of at least fifteen semester hours. The curriculum is designed to complement many undergraduate degree programs. Students also have the option of tailoring the Information Studies Minor sequence to focus their studies on Human-Computer Interaction or Digital Humanities. Please contact the advising office in your home department for details.

## Minor and Certificate Programs

## **Minor**

The transcript-recognized undergraduate academic minor must be completed in conjunction with an undergraduate degree at The University of Texas at Austin. For more information regarding the requirements for achieving a minor, including a comprehensive list of minors, please visit the Minors and Certificate Programs (p. 13) section of the Undergraduate Catalog.

## Information Studies Minor

Fifteen semester credit hours composed of:

Requirements		Hours	
INF 304D	Introduction to Information Studies		3
Six upper-division hours of Information Studies			6
Six additional hours of li	nformation Studies		6

Courses presented for the minor must have grades of at least C-.

## **Certificate Programs**

A student may not earn any transcript-recognized certificate in the same field as his or her major, and at least one certificate course must be outside the requirements of the major. However, certificate courses outside the major may be counted toward other degree requirements.

Students admitted to transcript-recognized certificates must contact their academic advisers to have approved certificates added to their degree audit profiles. This allows progress toward the credential to be tracked and ensures that certificates are added to official transcripts upon graduation, if all requirements are met.

To see a full list of certificates offered at the University, please see The University (p. 15) section of the Undergraduate Catalog.

## **Digital Humanities Certificate**

The digital humanities represent the area of study where humanities disciplines and studies in information engage digital tools, archives, artifacts, and information technologies. This certificate is designed to introduce students to the ideas, materials, and computational tools that underlie this field. It is open to students of all majors. Students take 18 credit hours from a selection of courses taught in different departments and colleges at The University of Texas at Austin and must earn a letter grade of C- or better in all courses required for certification. Some courses required by the certificate may also fulfill degree requirements established by a student's major department.

To earn the certificate, students must take:

Requirements		Hours	
Introduction to the Digita	al Humanities		3
INF 315E	Information and Culture (Topic: Introduction to Digital Humanities)		
Twelve hours of coursew based course Skills	vork including at least one methods-		12
AET 305	Foundations of Music Technology		
AET 305	Foundations of Music Technology Foundations of Digital Imaging and Visualization		
AET 323	Film and Game Scoring		
AET 325	Digital Production Art 2-D		
AET 326	Digital Production Art 3-D		
AET 327	Advanced 3-D Modeling		
ART 318C	Transmedia: Digital Time-Art I		
ART 338C	Transmedia: Digital Time-Art II		
ART 358C	Transmedia: Digital Time-Art III		
INF 315E	Information and Culture (Topic: Introduction to Databases)		
INF 350G	Information in Society (Topic: Introduction to Audio Preservation and Reformatting)		
J 339T	Topics in Specialized Journalistic Skills (Topic 1: Mapping in Storytelling)		
MUS 319D	Foundations of Digital Sound and Music		
Electives			
CMS 348K	Visual Media and Interaction		
CMS 341	Digital Communications		
INF 304D	Introduction to Information Studies		
INF 315E	Information and Culture (Topic: Human Computer Interaction)		
INF 315E	Information and Culture (Topic: Introduction to Digital Cultures)		
INF 327E	Information and People (Topic: Comics, Graphic Novels, and Manga)		
INF 327E	Information and People (Topic: Media & Literacy)		
INF 350E	Information Technology (Topic: Concepts and Practices in Information Security)		

INF 331C	Beyond Google	
INF 335C	Information in Cyberspace	
INF 350E	Information Technology (Topic: Information Ethics)	
INF 350E	Information Technology (Topic 1: Technologies of the Book)	
INF 350G	Information in Society (Topic: Historical Museums: Context and Practice)	
J 336F	Social Media Journalism	
J 355F	Living in the Information Age	
RHE 309K	Topics in Writing (Approved title)	
RHE 330C	Advanced Studies in Digital Rhetoric (Topic: Digital Rhetorics of Satire)	
RHE 330C	Advanced Studies in Digital Rhetoric (Topic 8: Writing with Sound)	
RHE 330C	Advanced Studies in Digital Rhetoric (Topic 9: Digital Self and Rhetoric)	
RTF 331P	Topics in New Communication Technologies (Topic: Internet Cultures)	
RTF 326C	Tech Culture	
MUS 329E	Introduction to Electronic Media	
MUS 329J	Introduction to Computer Music	
A capstone course involving project-based Digital Humanities work		3
AHC 679HB	(Honors Tutorial Course)	
GOV 679HB	(Honors Tutorial Course)	
HIS 679HB	(Honors Tutorial Course)	
LAH 679TB	(Honors Thesis)	
LIN 679HB	(Honors Tutorial Course)	
MES 679HB	(Honors Tutorial Course)	
PHL 679HB	(Honors Tutorial Course)	
RHE 330C	Advanced Studies in Digital Rhetoric	
RHE 679HB	Honors Tutorial Course	
R S 679HB	(Honors Tutorial Course)	
REE 679HB	(Honors Tutorial Course)	
POR 379H	Honors Tutorial Course	
SPN 377H	Honors Tutorial Course	
UGS 320K	Undergraduate Research Experience	
UGS 320L	Undergraduate Research Experience	
Please Note:		

#### Please Note:

Capstone courses may also be arranged as individual study courses between one student and one faculty member.

## Courses

Not all courses are taught each semester and summer session. Students should consult the *Course Schedule* (http://registrar.utexas.edu/ schedules) to determine which courses and topics will be offered during a particular semester or summer session. The *Course Schedule* may also

reflect changes made to the course inventory after the publication of this catalog.

A full explanation of course numbers is given in *General Information* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/credit-value-and-course-numbers). In brief, the first digit of a course number indicates the semester hour value of the course. The second and third digits indicate the rank of the course; if they are 01 through 19, the course is of lower-division rank; if 20 through 79, of upper-division rank; if 80 through 99, of graduate rank.

## **Information Studies: INF**

## **Lower-Division Courses**

## INF 303D. Academic Success In The Digital University.

Exposure to a wide variety of information and academic resources, tools, and skills. Focus is on the digital landscape of higher education. Subjects include features of the primary learning management system used; communication and organizational tools; library resources; basic online research resources; and ethical and safety concerns. Three lecture hours a week for one semester.

## INF 304D. Introduction to Information Studies.

Overview of the information field as it relates to the technology-based world culture. Subjects may include the idea of information, information in relation to technology and culture, human-computer interaction, information technology in education, information literacy and the "digital divide," information and communication technology, information and gender, public information policy, and information organization and preservation. Three lecture hours a week for one semester. Information Studies 304D and 304W may not both be counted.

## INF 315C. Topics In Human-Computer Interaction.

Fundamental concepts, techniques, and questions in human-computer interaction. Topics covered may include user research, interaction design, user interface design, and usability. Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

## INF 315E. Information and Culture.

Examines information as a cultural phenomenon. Topics may include ecommerce, privacy and secrecy, censorship, information as a commodity, Internet culture, access to cultural heritage, and control of the cultural record. Three lecture hours a week for one semester. Information Studies 315E and 315W may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Prerequisites may vary with the topic.

## **Upper-Division Courses**

## INF 121, 221, 321. Individual Studies.

In-depth study of a problem or topic related to information studies. Individual instruction. May be repeated for credit. Prerequisite: Consent of Instructor

## INF 322T. Children's Literature.

Evaluation, selection, and proper and creative use of books and other media with children. Three lecture hours a week for one semester. Information Studies 322T and 322W may not both be counted. Prerequisite: Upper-division standing.

## INF 327E. Information and People.

Study of how individuals and groups create meaning. Explores research topics concerning people and communication, including information literacy, organizations and innovation, knowledge management, and identifying information needs. Three lecture hours a week for one semester. Information Studies 327E and 327W may not both be counted

unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; prerequisites may vary with the topic.

#### INF 331C. Beyond Google.

A general introduction to information searching and evaluating information in digital, print, visual, and aural formats. Three lecture hours a week for one semester. Information Studies 331C and 331W may not both be counted. Prerequisite: Upper-division standing.

#### INF 335C. Information in Cyberspace.

An overview of the history and social impact of Internet, Web, and other network technologies. Students will learn methods and tools of media creation with an emphasis on technological self-sufficiency. Three lecture hours a week for one semester, including some webbased instruction. Information Studies 335C and 335W may not both be counted. Prerequisite: Upper-division standing.

#### INF 343C. Information Organization and Access.

Basic aspects of representing and organizing information resources in digital information settings. Introduces the fundamentals of identifying informational objects, including description, content indication, and metadata. Three lecture hours a week for one semester. Information Studies 343C and 343W may not both be counted. Prerequisite: Upperdivision standing.

#### INF 350C. Advanced Topics In Human-Computer Interaction.

Advanced concepts, techniques, and questions in human-computer interaction. Topics covered may include the design of rich interfaces, evaluation of interactive systems, and visual design. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper division standing; prerequisites may vary with the topic.

#### INF 350E. Information Technology.

Design and use of information technologies, including interface design, trends in information technology development, usability, information retrieval, immersive media, and information architecture. Three lecture hours a week for one semester. Information Studies 350E and 350W may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; prerequisites may vary with the topic.

Topic 1: Technologies of the Book. Additional prerequisite: Consent of instructor.

#### INF 350G. Information in Society.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; prerequisites may vary with the topic.

#### INF 371C. Projects in Human-Computer Interaction.

Hands-on user experience design project. Students examine users' needs; complete an interactive system design, evaluation, re-design; and/or similar tasks. Three lecture hours a week for one semester. Prerequisite: Upper-division standing; Information Studies 304D or 304W; 315C; and 6 upper-division credit hours in Information Studies courses with an HCI/UX emphasis.

#### INF 371E. Projects In Information Studies.

Study of a current practical question, phenomenon, or controversy involving information. Includes designing, evaluating, and testing an information system or producing a project report. Three lecture hours a week for one semester. Prerequisite: Upper-division standing; completion of or concurrent enrollment in twelve hours of coursework in Information Studies.

# **College of Liberal Arts**

Randy L. Diehl, PhD, Dean Richard R. Flores, PhD, Senior Associate Dean, Academic Affairs Marc A. Musick, PhD, Senior Associate Dean, Student Affairs Esther L. Raizen, PhD, Senior Associate Dean, Research and Graduate Student Affairs Kathleen M. Aronson, PhD, Assistant Dean, Development Joseph TenBarge, BA, Assistant Dean, Information Technology and Facilities Kimberly Krieg, BS, Assistant Dean, Student Affairs https://liberalarts.utexas.edu/

# **General Information**

## Arts and Sciences Education

The academic program offered cooperatively by the College of Liberal Arts and the College of Natural Sciences provides what is sometimes referred to as a "liberal arts" or an "arts and sciences" education. No matter what area of knowledge a student intends to specialize in, the program of study will require courses in both colleges. The colleges work together to ensure that the individual interests and needs of the students pursuing an arts and sciences program are met.

Guidelines for developing a coherent plan of study are provided by major requirements, by sequential prerequisites, and by optional patterns of emphasis. Departmental majors, areas of specialization, and interdepartmental programs are designed to enable every student to study at least one field in depth. These programs are sufficiently broad in scope to allow students in the same major to develop quite different plans of study in pursuit of their individual interests and goals. Each student should choose courses that are intellectually challenging and that contribute to his or her long-term objectives.

Arts and sciences students are required to take a certain number of courses in the natural sciences, the social and behavioral sciences, and the humanities. Consequently, whatever their fields of study, they have the opportunity to learn something about the basic differences in the ways questions are raised and answered in several fields of inquiry, and about the techniques for validating the answers and putting the results to use. At the same time, they may gain some of the philosophical and historical perspectives that illuminate and give form to general or specialized knowledge and help to reveal its relevance.

Both teachers and students sometimes make the assumption that independent and creative study is exclusively for the gifted. In fact, the primary requirement is that the student be highly motivated, although he or she must also demonstrate ability. The departments that make up the two arts and sciences colleges encourage all qualified students to work independently in special honors courses and seminars and in conference, studio, or laboratory work. The student is free to define a major, to determine whether a given assignment will be an adventure or a chore, free to develop its latent possibilities or merely satisfy its explicit demands. True creativity presupposes more than a gift for innovation; it requires an unceasing commitment to thinking and working at one's highest level.

As competence is gained in a chosen field, the mind should be progressively sharpened, disciplined, and enriched. The student who leaves arts and sciences studies with an enhanced understanding of self and humankind, of cultural and historical heritage, of the world and the universe, and of the moral values that make it possible to live a meaningful life, will have made the most of education, having gained something over and above the objective of vocational preparedness.

# Financial Assistance Available through the College

Special scholarships established by individuals and foundations are open to undergraduates in the College of Liberal Arts. Financial assistance is also available in many College of Liberal Arts departments, centers, and programs for specific undergraduate majors.

Students with financial need should apply for aid through the Office of Financial Aid. The Study Abroad Office also administers a number of awards designed to help qualified students participate in international programs.

Information on College of Liberal Arts scholarships is given online (https://liberalarts.utexas.edu/student-affairs/Programs/ Scholarships.php). Information on scholarships awarded through individual departments, centers, and programs is published on their websites.

## **Student Services**

## Academic Advising

The assistant dean for the Student Division, under the guidance of the associate dean, oversees advising activity for all students in the College of Liberal Arts. The Student Division provides administrative and logistical support for all operations relating to students, including adviser training, official degree checks, and graduation certification.

Liberal Arts advisers embrace the idea that advising is teaching, and foster student development through partnerships and practices dedicated to student success. Advisers work with students to identify and achieve academic and life goals and establish a timely graduation plan, encourage critical thinking strategies, and stimulate intellectual and cultural development. In these ways, advisers teach the value of a liberal arts education for engaged, self-directed learners.

Departmental advisers work directly with their students regarding course selection. They also initiate petitions affecting the major or minor; encourage co- and extracurricular activities, including study abroad; and administer honors programs.

Students who have not yet declared a major work directly with Student Division advisers, who guide students through the process of selecting courses and exploring majors. Student Division advisers also work with students on withdrawing from classes, appeals for exceptions to standard policies and procedures, graduation applications, certifying all graduates' academic programs, and nonacademic issues.

Every student in the college has access to appropriate advisers throughout his or her academic career. In addition, students can create and view their own advising audits using IDA, the Interactive Degree Audit system. The advising audit is produced for advising purposes only and is not an official degree audit.

## **Career Services**

Liberal Arts Career Services (LACS) provides career assistance to current and newly graduated liberal arts students. The goal of the office is to connect College of Liberal Arts students with postgraduate and experiential learning opportunities throughout the world.

Through job search advising, résumé critiques, mock interviews, creditbased classes, and a variety of workshops and programs, LACS helps students develop the skills needed to succeed in the job search and in the workplace. LACS also provides comprehensive pre-law advising services, including application assistance and review and law school admission advising.

To connect students to the workplace, LACS manages job and internship postings, provides job and internship fairs and events, and manages an on-campus interviewing program involving a variety of employers and opportunities. Students have access to career management tools and resources with an online recruiting system, LiberalArts@Work. LACS maintains a resource room with books, DVDs, company literature, and job postings.

Hundreds of companies are assisted by LACS each year through computer-based résumé searches, information sessions, and on-campus interviewing. Résumé books for a variety of career fields are available to employers at no charge.

As a complement to the assistance available from LACS, the University's Sanger Learning Center (https://ugs.utexas.edu/slc) and the Center for Strategic Advising and Career Counseling (https:// ugs.utexas.edu/vick) in the School of Undergraduate Studies provide career services to all students. The centers offer professional assistance to students in choosing or changing their majors or careers, and planning for graduate study.

For liberal arts students who have completed a teacher certification program, Education Career Services in the College of Education assists with the education job search. Certification candidates must register with Education Career Services, George I. Sánchez Building 216, at the beginning of their student-teaching semester. The office also assists those who wish to find teaching jobs at the college level or in private schools, community colleges, or overseas schools in which certification is not required. See Preparation for Teacher Certification (p. 16) for additional information.

The University makes no promise to secure employment for each graduate.

# **Admission and Registration**

## Admission

Admission and readmission of undergraduate students to the University is the responsibility of the director of admissions. Information about admission to the University is given in *General Information* (http://catalog.utexas.edu/general-information/admission).

## Admission to the Economics Major

All students who wish to major in Economics must be admitted to the University according to the procedures given in *General Information* (http://catalog.utexas.edu/general-information/admission/ undergraduate-admission).

## **Freshman Admission**

Freshmen applicants seeking admission to the Economics degree program through the College of Liberal Arts must meet the calculus readiness requirement by the official admissions application deadline. More information about the calculus readiness requirement is available from the University Admissions Office website (https:// admissions.utexas.edu/apply/calculus-readiness).

Applicants should use the ApplyTexas online application (https:// www.applytexas.org/adappc/gen/c\_start.WBX) and select the Economics major option listed in the College of Liberal Arts as a firstchoice major.

## **External Transfer Admission**

Students who wish to transfer to the University from another college or university must apply to the Office of Admissions as described in General Information. External transfer applicants seeking admission to the Economics degree program through the College of Liberal Arts must meet the following requirements:

1. Completion of Economics 304K and 304L (or their equivalents) with a grade of at least C- in each course

2. Completion of Mathematics 408K and 408L, or Mathematics 408C and 408D, or Mathematics 408N and 408S, or an equivalent calculus sequence, with a grade of at least *C*- in each course

Applicants should use the ApplyTexas online application (https:// www.applytexas.org/adappc/gen/c\_start.WBX) and select the Economics major option listed in the College of Liberal Arts as a firstchoice major.

## **Internal Transfer Admission**

All internal transfer applicants should use the online Economics Major Internal Transfer Application and apply by the deadline listed on the department website (https://liberalarts.utexas.edu/economics/ undergraduate/prospective/Admission%20and%20Declaring%20the %20Major.php). Internal transfer applicants seeking admission to the Economics degree program through the College of Liberal Arts must meet the following requirements:

1. Completion of Economics 304K and 304L (or their equivalents) with a grade of at least *C*- in each course

2. Completion of Mathematics 408K and 408L, or Mathematics 408C and 408D, or Mathematics 408N and 408S, or an equivalent calculus sequence, with a grade of at least *C*- in each course

# The Bachelor of Science in Environmental Science

Students must be admitted to the Bachelor of Science in Environmental Science degree program; they may apply for admission after completing the following requirements: The student must earn a grade of at least *C*-in Biology 311C, Chemistry 301, and Mathematics 408C or 408N; and a grade of at least *B*- in Geological Sciences 401 or 303. To be competitive for admission, the student must have a grade point average of at least 2.75 in these four courses.

Applications are evaluated after the end of each fall and spring semester. Students whose applications are denied may reapply through the supplemental admission process the following semester. Admission decisions are based on the student's grade point average in the basic sequence courses, his or her University grade point average, and other factors; these factors include, but are not limited to, the difficulty of the student's course load, course repetitions, and proven mathematical ability. Students should consult advisers in the College of Liberal Arts Student Advising Office, Dorothy Gebauer Building 2.200, for information about the application process and application deadlines. Once admitted to the degree program, students will be advised in the Department of Geography and the Environment.

More information about the degree program is given in Bachelor of Science in Environmental Science (p. 387).

## Registration

*General Information* (http://catalog.utexas.edu/general-information/ registration-tuition-and-fees) gives information about registration, adding and dropping courses, transfer from one division of the University to another, and auditing a course. The *Course Schedule* (http:// registrar.utexas.edu/schedules), published before registration each semester and summer session, includes registration instructions, advising locations, and the times, places, and instructors of classes. The *Course Schedule* and the *General Information Catalog* are published on the registrar's website (http://registrar.utexas.edu).

# Academic Policies and Procedures

## **Repetition of a Course**

A student in the College of Liberal Arts may not repeat any course in which he or she has earned a grade of *C* or better.

## Honors

University-wide honors are described in University Honors (p. 19) and in the *General Information Catalog* (http://catalog.utexas.edu/generalinformation/registration-tuition-and-fees). In addition, the College of Liberal Arts provides recognition through the Dean's Honor List and the Plan I Honors Programs. Students may also graduate with departmental honors and earn membership in one or more of the honorary scholastic societies open to undergraduates.

## **Dean's Honor List**

The Dean's Honor List, prepared at the end of each long-session semester, gives official recognition and commendation to students whose grades for the semester indicate distinguished academic accomplishment. Both the quality and the quantity of work done are considered; a grade of *F* in any course makes the student ineligible, regardless of other grades.

The Honor List is divided into five groups; according to the number of grade points they earn, students are listed under one of the following classifications:

- · Summa cum Laude (67 or more grade points)
- Cum Laude Ampla et Magna (61-66 grade points)
- Magna cum Laude (58-60 grade points)
- Ampla cum Laude (55–57 grade points)
- Cum Laude (52-54 grade points)

## Liberal Arts Honors Programs, Plan I

Liberal Arts Honors Programs coordinates the various honors opportunities available to Plan I students in the college: the Freshman Honors Program, the departmental honors programs, and the Liberal Arts Honors Program. This array of choices is designed for students who seek flexibility and choice in their honors work and for those who want to pursue an honors degree in a particular discipline.

The Freshman Honors Program gives selected students access to honors sections of lower-division introductory courses. Each student admitted to the program is required to take an active part in three courses in the first year. Liberal Arts Honors 102H, *The Idea of the Liberal Arts*, Liberal Arts Honors 103H, *The Ideas of Civic Engagement*, and one designated honors writing course. The program serves as a preparation for departmental honors programs and for the upper-division Liberal Arts Honors Program. Students must apply to the Freshman Honors Program when they apply to the University. Admission decisions are based on the applicant's demonstrated commitment to the liberal arts, test scores, high school records, and an application essay. The upper-division Liberal Arts Honors Program offers challenging and intensive interdisciplinary courses taught by distinguished faculty members. Students who have completed at least 60 semester hours of coursework and have earned a University grade point average of at least 3.50 are eligible to enroll in these courses. There is no application process.

The requirements for graduation with liberal arts honors are

- 1. Graduation from the College of Liberal Arts with any degree other than the Bachelor of Arts, Plan II
- 2. A University grade point average of at least 3.50 at graduation
- 3. Completion of at least three upper-division liberal arts honors (LAH) courses with at least a grade of *A* in two of the courses and a grade of at least *B* in the third
- 4. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

The statement "Liberal Arts Honors" appears on the academic record of each graduate who fulfills these requirements. The student may earn both liberal arts honors and special honors in his or her major department.

The three upper-division liberal arts honors courses required for graduation with liberal arts honors may be used, with a fourth liberal arts honors course, to fulfill the 12 hour minor requirement for the Bachelor of Arts, Plan I, unless the work in the minor is specified by the student's major department.

#### **Departmental Honors Programs**

Most departments in the College of Liberal Arts offer honors programs to their majors. Minimum requirements for departmental honors are

- 1. A University grade point average of at least 3.00
- 2. A three-semester-hour thesis or research project, or a reasonable equivalent, with a grade of at least *B*
- 3. Completion, with a grade point average of at least 3.50, of the coursework required for a major in the field
- 4. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

Each department may establish additional or more rigorous requirements.

The statement "Special Honors in (name of field)" appears on the transcript of each graduate certified as having completed the honors program.

#### African and African Diaspora Studies Honors Program

Majors who plan to seek special honors in African and African diaspora studies should apply to the undergraduate adviser for admission to the honors program at least two semesters before they expect to graduate. A University grade point average of at least 3.00 is required for admission. The requirements for graduation with special honors are

- 1. African and African Diaspora Studies 679H, *Honors Tutorial Course*, with a grade of at least *B* in each half
- 2. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors
- 3. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### **American Studies Honors Program**

Majors who plan to seek special honors in American studies should apply to the honors adviser for admission to the honors program at

least two semesters before they expect to graduate. A University grade point average of at least 3.00 is required for admission. In addition to the requirements of the major, requirements for graduation with special honors are

- 1. American Studies 679H, *Honors Tutorial Course*, with a grade of at least *B* in each half
- 2. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors
- 3. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### Anthropology Honors Program

Majors who plan to seek special honors in anthropology should apply to the honors adviser for admission to the honors program no later than two semesters before they expect to graduate; the applicant must be recommended by the faculty member who will supervise the honors work. A University grade point average of at least 3.00 and a grade point average in anthropology of at least 3.50 are required for admission. The requirements for graduation with special honors, which are in addition to the requirements for the major, are

- 1. Anthropology 679H, *Honors Tutorial Course*, with a grade of *A* in each half
- 2. Satisfactory performance on a comprehensive oral examination centered on the thesis completed in Anthropology 679H
- 3. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors
- 4. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### Asian American Studies Honors Program

Ethnic studies majors who plan to seek special honors in Asian American studies should apply to the honors adviser for admission to the honors program no later than two semesters before they expect to graduate. A University grade point average of at least 3.00 is required for admission. The requirements for graduation with special honors, which are in addition to the requirements for the concentration, are

- 1. Asian American Studies 679H, *Honors Tutorial Course*, with a grade of *A* in each half
- 2. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the concentration in Asian American studies and for honors
- 3. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### Asian Cultures and Languages Honors Program

Majors who plan to seek special honors in Asian cultures and languages should apply to the honors adviser by April 30 for admission to the honors program the following fall. If April 30 falls on a weekend or an official university holiday, the application is due on the next business day. Requirements for admission are completion of 60 semester hours of coursework at the University, a University grade point average of at least 3.00, and a grade point average of at least 3.50 in Asian cultures and languages. Students must complete at least 12 semester hours of upper-division coursework in the Department of Asian Studies before applying for admission to the honors program. The requirements for graduation with special honors, which are in addition to the requirements for the major, are

1. Asian Studies 678H, *Honors Tutorial Course*, with a grade of *A* in each half

- 2. A University grade point average of at least 3.00, and a grade point average of at least 3.50 in the coursework required for the major and for honors
- 3. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### **Asian Studies Honors Program**

Majors who plan to seek special honors in Asian studies should apply to the honors adviser by April 30 for admission to the honors program the following fall. If April 30 falls on a weekend or an official university holiday, the application is due on the next business day. Requirements for admission are completion of 60 semester hours of coursework at the University, a University grade point average of at least 3.00, and a grade point average in Asian studies of at least 3.50. Students must complete at least 12 semester hours of upper-division coursework in the Department of Asian Studies before applying for admission to the honors program. The requirements for graduation with special honors, which are in addition to the requirements for the major, are

- 1. Asian Studies 678H, *Honors Tutorial Course*, with a grade of A in each half
- 2. A University grade point average of at least 3.00, and a grade point average of at least 3.50 in the coursework required for the major and for honors
- 3. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### **Classical Studies Honors Program**

Majors who plan to seek special honors in classical studies should apply to the honors adviser for admission to the honors program at least one full academic year before they expect to graduate. A University grade point average of at least 3.00 is required for admission, as is a grade point average of at least 3.50 in all coursework required for the major and specialization that the student has completed. Completion of Ancient History and Classical Civilization 378 or Classical Civilization 375 is highly recommended before applying for special honors. The requirements for graduation with special honors, which are in addition to the requirements of the major, are

- 1. Classical Civilization 679H, *Honors Tutorial Course*, or Ancient History and Classical Civilization 679H, with a grade of at least *A* in each half
- 2. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors
- 3. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### **Classical Languages Honors Program**

Majors who plan to seek special honors in Greek, special honors in Latin, or special honors in classics should apply to the honors adviser for admission to the honors program at least one full academic year before they expect to graduate. A University grade point average of at least 3.00 and a grade point average in Greek (for the Greek specialization), Latin (for the Latin specialization), or Greek, Latin, and classical civilization combined (for the classics specialization) of at least 3.50 are required for admission. Completion of Ancient History and Classical Civilization 378 or Classical Civilization 375 is highly recommended before applying for special honors. The requirements for graduation with special honors, which are in addition to the requirements of the major, are

- 1. Greek 679H, Latin 679H, or Classical Civilization 679H, *Honors Tutorial Course*, with a grade of at least *A* in each half
- 2. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors

3. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### **Economics Honors Program**

Majors who plan to seek special honors in economics must apply to the honors adviser for admission to the honors program before the first registration period for the first semester of their senior year. Students are encouraged to apply as early as the beginning of the first semester of their sophomore year. A University grade point average of at least 3.00 and a grade point average in economics of at least 3.50 are required for admission. Before a student registers for Economics 378H, the student's thesis proposal must be approved first by the supervising instructor and then by the honors adviser. The requirements for graduation with special honors are

- 1. At least 34 semester hours in economics
- 2. Economics 378H, *Honors Tutorial Course I*, and Economics 379H, *Honors Tutorial Course II*, with a grade of at least *B* in each
- 3. Regular participation in designated honors courses
- 4. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors
- 5. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### **English Honors Program**

Majors who plan to seek special honors in English should apply for admission to the honors program prior to their junior year. Application forms and information about the program are available in the English Advising Office, Parlin Hall 114, and on the Department of English website (http://www.utexas.edu/cola/depts/english). The requirements for graduation with special honors are

- 1. Completion of the requirements for a major in English
- 2. Completion of three or more upper-division English honors courses with grades of at least *B+;* these courses may be counted toward the requirements of the major; two of these courses must be completed prior to enrolling in English 368H
- 3. English 368H, *Honors Tutorial Course I* and English 369H, *Honors Tutorial Course II* with a grade of at least *B+* in each, resulting in the presentation and defense of a thesis judged to be worthy of honors
- 4. A University grade point average of at least 3.33 and a grade point average of at least 3.66 in the coursework required for the major and for honors

#### French Studies Honors Program

Majors who plan to seek special honors may apply to the honors adviser for admission to the honors program during the semester in which they will complete 60 semester hours of coursework. To enter the program, a student must have completed at least 60 semester hours of coursework, including 12 hours of upper-division coursework in French. These 12 hours must include at least one course numbered 330 or above. A University grade point average of at least 3.00 and a grade point average in French of at least 3.50 are also required for admission. The requirements for graduation with special honors, which are in addition to the requirements for the major, are

- 1. French 379H, Honors Tutorial Course, with a grade of at least B
- 2. Satisfactory performance on an honors examination
- 3. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors

4. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### **Geography Honors Program**

Majors who plan to seek special honors in geography should apply to the honors adviser for admission to the honors program no later than two semesters before they expect to graduate. A University grade point average of at least 3.00 and a grade point average in geography of at least 3.50 are required for admission. The requirements for graduation with special honors are

- 1. Geography 679H, *Honors Tutorial Course*, with a grade of at least *A* in each half
- 2. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors
- 3. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### **German Honors Program**

Majors who plan to seek special honors in German should apply to the honors adviser for admission to the honors program upon completion of 30 semester hours; they must apply no later than upon completion of 90 semester hours. Admission is by means of a special examination; a University grade point average of at least 3.00 is also required for admission. The requirements for graduation with special honors, which are in addition to the requirements for the major, are

- 1. German 679H, *Honors Tutorial Course*, with a grade of *at least A* in each half
- 2. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors
- 3. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### German, Scandinavian, and Dutch Studies Honors Program

Majors who plan to seek special honors in German, Scandinavian, and Dutch studies should apply to the honors adviser for admission to the honors program upon completion of 30 semester hours; they must apply no later than upon completion of 90 semester hours. Admission is by means of a special examination; a University grade point average of at least 3.00 is also required for admission. The requirements for graduation with special honors, which are in addition to the requirements for the major, are

- 1. German, Scandinavian, and Dutch Studies 679H, with a grade of at least *A* in each half
- 2. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors
- 3. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### **Government Honors Program**

Majors who plan to seek special honors in government should apply to the honors adviser for admission to the honors program in the spring semester of their junior year. A University grade point average of at least 3.00 is required for admission. The requirements for graduation with special honors are

- 1. Thirty-three semester hours of government, including Government 679H, *Honors Tutorial Course*, with a grade of at least *B* in each half
- 2. Regular participation in honors seminars

- 3. Satisfactory performance on a comprehensive oral or written honors examination
- 4. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors
- 5. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### Health and Society Honors Program

For the Health and Society Honors Program, students complete a twosemester (six hours) honors thesis under the supervision of a faculty member. Students interested in writing an honors thesis should contact the honors adviser, preferably in the first semester of their junior year, in order to discuss plans for the thesis and begin to lay the groundwork for their project. Students applying for the honors program must have a University grade point average (GPA) of at least 3.00, must have completed Health and Society 301 with a *B*- or better, and must have a GPA of at least 3.50 in their core health and society courses at the time of the application. Students are also expected to identify a thesis supervisor at the time of application. The requirements for graduation with special honors are

- 1. Completion of liberal arts and health and society requirements, except for Health and Society 378
- 2. A University grade point average of at least 3.00
- 3. A health and society grade point average of at least 3.50
- 4. Health and Society 679H, Honors Thesis

#### **History Honors Program**

History majors who plan to seek special honors in history should apply to the honors adviser for admission to the honors program in the fall semester of the junior year. Application forms and information about the program are available in the History Undergraduate Advising Office, Garrison Hall 1.140. The requirements for graduation with special honors, which are in addition to the requirements of the major, are

- 1. History 347L, *Seminar in Historiography*, normally taken in the spring semester of the junior year; this course may be counted toward the 30 hours in history required for the major
- 2. History 679H, *Honors Tutorial Course*, with a grade of at least *B* in each half
- 3. Satisfactory performance on an oral examination centered on the thesis completed in History 679HB
- 4. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors
- 5. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

Normandy Scholar Program (NSP) students may substitute an approved upper-division NSP history course for the History 347L requirement.

#### Human Dimensions Of Organizations Honors Program

Majors who plan to seek special honors in human dimensions of organizations should apply to the honors adviser for admission to the honors program at least one full academic year before they expect to graduate. A University grade point average of at least 3.00 is required for admission, as is a grade point average of at least 3.50 in all coursework required for the major that the student has completed. The requirements for graduation with special honors, which are in addition to the requirements of the major, are

1. Human Dimensions of Organizations 359H and 379H, *Honors Tutorial Courses*, with approval of the student's thesis topic by the director

of human dimensions of organizations, and a grade of at least A- in each half. Students will take these two courses instead of HDO 379.

- 2. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors
- 3. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### **Humanities Honors Program**

Majors who plan to seek special honors in humanities should apply to the humanities adviser for admission to the honors program no later than the first semester of the junior year. The requirements for graduation with special honors are

- 1. A major in humanities
- 2. Humanities 679H, *Honors Tutorial Course*, with a grade of at least A- in each half
- A grade of "Recommended for Special Honors" on an oral examination, conducted and graded by faculty members qualified in the student's area of work, covering the thesis completed in Humanities 679H and a reading list
- 4. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors
- 5. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

# Iberian and Latin American Languages and Cultures Honors Program

Honors will be awarded to students who successfully complete a significant scholarly essay (normally 30 to 50 pages in length). This project should be done in close collaboration with a department faculty member. Majors wishing to graduate with honors should speak with the department professor with whom they want to work. The requirements for graduation with special honors are:

- Spanish 377H, Honors Tutorial Course or Portuguese 379H, Honors Tutorial Course, with a grade of at least A. Spanish 377H or Portuguese 379H, is offered by individual instruction. It cannot be undertaken before the senior capstone requirement, but may be taken simultaneously. Students who are admitted to the honors program conduct individual research on a literary, linguistic, or cultural topic. A faculty member in the Department of Spanish and Portuguese will supervise the student's research and writing. A second reader is required and may be either in the Department of Spanish and Portuguese or outside of the department. Spanish 377H or Portuguese 379H is taken in addition to the major requirements.
- 2. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors.
- 3. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree.

#### International Relations and Global Studies Honors Program

Majors who plan to seek special honors in international relations and global studies should apply to the honors adviser for admission to the honors program at least one full academic year before they expect to graduate. A University grade point average of at least 3.00 is required for admission, as is a grade point average of at least 3.50 in all coursework required for the major that the student has completed. The requirements for graduation with special honors are

1. International Relations and Global Studies 678H, *Honors Tutorial Course*, with a grade of at least an *A*- in each half

- 2. Satisfactory defense of the honors thesis completed in International Relations and Global Studies 678HB
- 3. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors
- 4. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

The requirements for special honors are in addition to the requirements of the major, except that International Relations and Global Studies 678H may be counted toward the major in place of International Relations and Global Studies 378, the capstone research course.

#### Islamic Studies Honors Program

Majors who plan to seek special honors in Islamic studies should apply to the honors adviser for admission to the honors program at the beginning of their third year; they must apply no later than the beginning of their last year before graduation. A University grade point average of at least 3.00 is required for admission to the honors program. The requirements for graduation with special honors, which are in addition to the requirements for the major, are

- 1. Islamic Studies 679HA, and 679HB, Honors Tutorial Course
- 2. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors
- 3. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### **Italian Studies Honors Program**

Majors who plan to seek special honors in Italian Studies may apply to the honors adviser for admission to the honors program during the semester in which they will complete 60 semester hours of coursework. To enter the program, a student must have completed at least 60 semester hours of coursework, including 12 hours of upper-division coursework in Italian. These 12 hours must include Italian 365, Italian 375, or Italian Civilization 360. A University grade point average of at least 3.00 and a grade point average in Italian of at least 3.50 are also required for admission. The requirements for graduation with special honors, which are in addition to the requirements of the major, are

- 1. Italian 379H, Honors Tutorial Course, with a grade of at least B
- 2. Satisfactory performance on an honors examination
- 3. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors
- 4. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### **Jewish Studies Honors Program**

Majors who plan to seek special honors in Jewish studies should apply to the honors adviser for admission to the honors program at the beginning of their third year; they must apply no later than the beginning of their last year before graduation. A University grade point average of at least 3.00 is required for admission. The requirements for graduation with special honors, which are in addition to the requirements for the major, are

- 1. Jewish Studies 679H, *Honors Tutorial Course*, with a grade of A in each half
- 2. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors

3. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### Latin American Studies Honors Program

Majors who plan to seek special honors in Latin American studies should apply to the honors adviser for admission to the honors program no later than two semesters before they expect to graduate. A University grade point average of at least 3.00 and a grade point average in Latin American content coursework of at least 3.50 are required for admission. The requirements for graduation with special honors are

- 1. Latin American Studies 679H, *Honors Tutorial Course*, with a grade of at least *B* in each half and approval of the thesis by both the student's supervisor and the honors adviser
- 2. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors
- 3. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### **Linguistics Honors Program**

Upper-division linguistics majors who plan to seek special honors in linguistics should apply to the undergraduate honors adviser for admission to the honors program no later than the beginning of their last year. A University grade point average of at least 3.00 and a grade point average in linguistics coursework of at least 3.50 are required for admission. The requirements for graduation with special honors, which are in addition to the requirements of the major, are

- 1. Linguistics 679H, *Honors Tutorial Course*, with a grade of at least *B* in each half
- 2. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors
- 3. Completion in residence at the University of at least 60 semester hours counted toward the degree

#### Mexican American and Latina/o Studies Honors Program

Students who plan to seek special honors in Mexican American and Latina/o Studies should apply to the undergraduate adviser for admission to the honors program no later than two semesters before they expect to graduate. The requirements for admission are a University grade point average of at least 3.00 and a grade point average at least 3.50 in the required coursework. The requirements for graduation with special honors are

- 1. Thirty semester hours of coursework in Mexican American studies, including Mexican American Studies 679H, *Honors Tutorial Course*
- 2. A grade of at least *A* in Mexican American Studies 361 or Mexican American Studies 362
- 3. Mexican American Studies 679H, with a grade of at least B in each half
- 4. Satisfactory performance on an oral presentation centered on the honors thesis completed in Mexican American Studies 679H
- 5. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the concentration and for honors
- 6. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### Middle Eastern Languages and Cultures Honors Program

Majors who plan to seek special honors in Middle Eastern languages and literatures should apply to the honors adviser for admission to the honors program at the beginning of their third year; they must apply no later than the beginning of their last year before graduation. A University grade point average of at least 3.00 is required for admission. The requirements for graduation with special honors, which are in addition to the requirements for the major, are

- 1. Middle Eastern Languages and Cultures 679HA, and 679HB, *Honors Tutorial Course*
- 2. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors
- 3. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### Middle Eastern Studies Honors Program

Middle Eastern studies majors who plan to seek special honors in Middle Eastern studies should apply to the honors adviser for admission to the honors program no later than two semesters before they expect to graduate. A University grade point average of at least 3.00 is required for admission. The requirements for graduation with special honors, which are in addition to the requirements for the major, are

- 1. Middle Eastern Studies 679HA, and 679HB, Honors Tutorial Course
- 2. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors
- 3. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### **Philosophy Honors Program**

Majors who plan to seek special honors in philosophy should apply to the undergraduate adviser for admission to the honors program at least two semesters before they expect to graduate. Completion of at least nine semester hours of upper-division coursework in philosophy is required for admission, in addition to a University grade point average of at least 3.00 and a grade point average in philosophy of at least 3.50. The requirements for graduation with special honors are

- 1. Philosophy 371H or 375M, with a grade of at least B
- 2. Philosophy 679H, *Honors Tutorial Course*, with a grade of at least *B* in both 679HA and 679HB
- 3. Satisfactory performance on an oral examination centered on the thesis completed in Philosophy 679H
- 4. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors
- 5. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

Philosophy 371H or 375M may be counted toward the requirements of the major; Philosophy 679H is taken in addition to the requirements of the major.

#### Plan II Honors Program: Special Honors

Plan II students who plan to seek special honors in Plan II should apply to the director of the Plan II Honors Program for enrollment in Tutorial Course 660H, *Thesis Course: Honors*, at least two semesters before they expect to graduate. A University grade point average of at least 3.50 is required. The requirements for graduation with special honors are

- 1. Tutorial Course 660H with a grade of at least *A* in each half, or a departmental equivalent with a grade of at least *A*
- 2. Satisfactory performance on an oral honors examination centered on the thesis completed in Tutorial Course 660H
- 3. A University grade point average of at least 3.50

4. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### **Psychology Honors Program**

Prospective candidates for special honors in psychology should apply to the honors adviser for admission to the honors program during the junior year. The application deadline is one week before the first registration period for the semester in which the student wants to enter the program. Requirements for admission are

- 1. A major in psychology
- 2. A University grade point average of at least 3.25 and a grade point average in psychology of at least 3.50
- 3. Completion of the following before entering the honors program: Psychology 301 or the equivalent with a grade of at least *C*, Psychology 418 with a grade of at least *C*, and two additional psychology courses
- 4. Consent of the honors adviser

The requirements for graduation with special honors are

- 1. Thirty-three semester hours of psychology, including Psychology 458, 158H, 359H, and 379H; the student must earn grades of at least *B* in Psychology 359H, *Honors Research I*, and Psychology 379H, *Honors Research II*
- 2. A University grade point average of at least 3.25 and a grade point average in all psychology courses of at least 3.50
- 3. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### **Religious Studies Honors Program**

Majors who plan to seek special honors in religious studies should apply to the honors adviser for admission to the honors program by the end of their junior year. A University grade point average of at least 3.00 is required for admission. The requirements for graduation with special honors are

- 1. Thirty-three semester hours of religious studies coursework, including completion of all major requirements
- 2. Religious Studies 679HA, *Honors Tutorial Course*, with a grade of at least *B*
- 3. Religious Studies 679HB, *Honors Tutorial Course*, with a grade of at least *A* and approval of the thesis by the chair of the Department of Religious Studies
- 4. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors
- 5. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### **Rhetoric and Writing Honors Program**

Majors who plan to seek special honors in rhetoric and writing should apply to the honors adviser for admission to the program at the beginning of their third year; they must apply no later than a year before they expect to graduate. Application forms and information about the program are available from the rhetoric and writing adviser. A University grade point average of at least 3.00 is required for admission, as is a grade point average of at least 3.50 in all coursework required of the major that the student has completed.

The requirements for graduation with special honors are

1. Rhetoric and Writing 679H, *Honors Tutorial Course*, with a grade of at least *A*- in each half

- 2. A grade point average of at least 3.50 in the coursework required for the major and for honors
- 3. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree.

# Russian, East European, and Eurasian Studies Honors Program

Majors who plan to seek special honors in Russian, East European, and Eurasian studies should apply to the honors adviser for admission to the honors program during the junior year or the first semester of the senior year. The application deadline is one week before the first registration period for the semester in which the student wants to enter the program. Requirements for graduation with special honors are

- 1. Russian, East European, and Eurasian Studies 679H, *Honors Tutorial Course*, with a grade of at least *B* in each half
- 2. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors
- 3. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

Russian, East European, and Eurasian Studies 679H, *Honors Tutorial Course* is taken in addition to the requirements of the major.

#### **Sociology Honors Program**

Majors applying for Sociology Honors should submit an application to the Sociology Honors Adviser. Consideration of applications for the fall semester begins on February 1<sup>st</sup>. Consideration of applications for the spring semester begins on September 15<sup>th</sup>. Applications will be considered until available slots have been filled. Requirements for admission are completion of 60 semester hours of coursework, a University grade point average of at least 3.00, and a grade point average in sociology of at least 3.50. Students must complete Sociology 302 and either 317L or an approved equivalent before applying for admission to the honors program; they should be enrolled in Sociology 317M and 379M no later than the semester in which they begin the honors thesis coursework. The requirements for graduation with honors in sociology are:

- 1. Sociology 679H, *Honors Tutorial Course*, with a grade of at least *A* in each half
- 2. Satisfactory performance on an oral defense of the senior thesis completed in the second half of Sociology 679H
- 3. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors
- 4. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### **Urban Studies Honors Program**

Majors who plan to seek special honors in urban studies should apply to the honors adviser for admission to the honors program at the beginning of their third year; they must apply no later than a year before they expect to graduate. A University grade point average of at least 3.00 is required for admission. The requirements for graduation with special honors are in addition to the requirements for the major; however, honors students may substitute Urban Studies 679H for Urban Studies 370. The requirements are

- 1. Urban Studies 679H, *Honors Tutorial Course*, with a grade of at least *A*in each half
- 2. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors

3. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### Women's and Gender Studies Honors Program

Majors who plan to seek special honors in women's and gender studies should apply to the honors adviser or undergraduate adviser for admission to the honors program no later than two semesters before they expect to graduate; the applicant must be recommended by the faculty member who will supervise the honors work. A University grade point average of at least 3.00 and a grade point average in women's and gender studies of at least 3.50 are required for admission. The requirements for graduation with special honors, which are in addition to the requirements for the major, are

- 1. Women's and Gender Studies 679H, *Honors Tutorial Course*, with a grade of at least *A* in each half
- 2. Satisfactory performance on a comprehensive oral examination centered on the thesis completed in Women's and Gender Studies 679H, *Honors Tutorial Course*
- 3. A University grade point average of at least 3.00 and a grade point average of at least 3.50 in the coursework required for the major and for honors
- 4. Completion in residence at the University of at least 60 semester hours of coursework counted toward the degree

#### **Scholastic Honorary Societies**

In addition to Alpha Lambda Delta and Phi Eta Sigma, honor societies for qualified freshman students in all academic fields, the University sponsors chapters of the following national organizations for which College of Liberal Arts students are eligible.

- *Alpha Epsilon Delta*. National honorary premedical fraternity for students who have completed at least three semesters of premedical work.
- Alpha Kappa Delta. National honorary sociology fraternity.
- Delta Phi Alpha. National honorary German fraternity.
- · Dobro Slovo. National honorary Slavic fraternity.
- Eta Sigma Phi. National honorary classical languages fraternity.
- Gamma Theta Upsilon. National honorary geography fraternity.
- · lota lota lota. National honorary Women's Studies society.
- Kappa Kappa Psi. National honorary band fraternity.
- · Mortar Board. National honorary society for seniors.
- · Omicron Delta Epsilon. National honorary economics fraternity.
- · Omicron Delta Kappa. National honorary leadership fraternity.
- Phi Alpha Theta. National honorary history fraternity.
- *Phi Beta Kappa.* National honorary society recognizing academic achievement in the arts and sciences.
- *Phi Kappa Phi*. National honor society open to students in all academic fields.
- · Pi Delta Phi. National honorary French fraternity.
- Pi Sigma Alpha. National honorary political science fraternity.
- Psi Chi. National honorary psychology fraternity.
- Sigma Delta Pi. National honorary Spanish fraternity.
- · Sigma Tau Delta. National honorary English society.
- Tau Beta Sigma. National honorary band society.

# Graduation

## Special Requirements of the College

All students must fulfill the General Requirements (p. 20) for graduation. Students in the College of Liberal Arts must also fulfill the following requirements.

- 1. The University requires that the student complete in residence at least 60 semester hours of the coursework counted toward the degree. For the Bachelor of Arts, Plan I, the Bachelor of Science in Environmental Science, and the Bachelor of Science in Psychology, these 60 hours must include at least 18 hours in the major. For the Bachelor of Arts, Plan II, 30 of these 60 hours must be taken in the College of Liberal Arts or the College of Natural Sciences.
- 2. The University requires that at least six semester hours of advanced coursework in the major be completed in residence. Additional requirements of the College of Liberal Arts are given later in this chapter with the requirements of the college's four degrees.

## Degree Audit and Applying for Graduation

A student in the College of Liberal Arts is expected to declare a major by the time he or she has completed 60 semester hours of coursework. The student must initiate major declaration in the department housing the major.

An official degree audit compares a student's coursework with degree requirements for a particular degree, major, and catalog. The degree audit normally provides an accurate statement of requirements, but the student is responsible for knowing the requirements for the degree as stated in a catalog under which he or she is entitled to graduate and for registering so as to fulfill these requirements. The student should seek an official ruling in the major department or in the Student Division before registering, if in doubt about any requirement.

Students are strongly encouraged to schedule an official degree check with a Student Division adviser once they are one semester away from graduating.

In the semester or summer session in which the degree is to be conferred, the candidate must be registered at the University and must file a graduation application form either online or in the Student Division. This must be done by the deadline to apply for an undergraduate degree, which is given in the official academic calendar. No degree will be conferred unless the graduation application form has been filed on time.

# **Degrees and Programs**

The College of Liberal Arts offers four degree programs: the Bachelor of Arts, Plan I; the Bachelor of Arts, Plan II; the Bachelor of Science in Environmental Science with a major in geographical sciences; and the Bachelor of Science in Psychology. The requirements of the Bachelor of Arts, Plan I are described in Bachelor of Arts, Plan I (p. 372). The Bachelor of Arts, Plan II, a broad liberal arts honors program for outstanding students, is described in Bachelor of Arts, Plan II (p. 384).

The Bachelor of Science in Environmental Science, offered by the College of Liberal Arts, the College of Natural Sciences, and the Jackson School of Geological Sciences, is designed for students interested in an interdisciplinary scientific perspective on environmental issues, analysis, and management. Students pursuing the degree through the College of Liberal Arts major in geographical sciences. The requirements for the degree are given in Bachelor of Science in Environmental Science (p. 387). The Bachelor of Science in Psychology is designed to offer students a more extensive scientific program than the Bachelor of Arts with a major in psychology. The requirements for the BSPsy are given in Bachelor of Science in Psychology (p. 390).

A student may not earn more than one Bachelor of Arts degree from the University. A student may not earn more than one Bachelor of Science in Environmental Science degree from the University. A student may not earn both the Bachelor of Arts with a major in psychology and the Bachelor of Science in Psychology.

The title of a graduate's degree appears on his or her diploma, but the major does not. Both the degree and the major appear on the graduate's University transcript.

## Applicability of Certain Courses Physical Activity Courses

Physical activity (PED) courses and Kinesiology 119 may not be counted toward a degree in the College of Liberal Arts. However, they are counted as courses for which the student is enrolled, and the grades are included in the grade point average.

## **ROTC Courses**

ROTC units are maintained on campus by the Departments of Air Force Science, Military Science, and Naval Science. Information about each program is available from the chair of the department.

Nine semester hours of designated University of Texas at Austin coursework in air force science, military science, or naval science may be counted toward any degree in the College of Liberal Arts. In general, this credit may be used only as electives or to fulfill the writing requirement. However, cross-listed courses may be used as appropriate to fulfill other degree requirements. A list of approved ROTC courses is available in the College of Liberal Arts, Student Division, Dorothy Gebauer Building 2.200.

## **Conference Courses and Internship Courses**

No more than six semester hours of credit earned in conference courses may be counted toward a single major in the College of Liberal Arts; no more than nine semester hours may be counted toward the degree.

No more than six semester hours of credit earned in internship courses may be counted toward a single major in the College of Liberal Arts; no more than nine semester hours may be counted toward the degree.

In addition, no more than nine semester hours of conference courses and internship courses combined may be counted toward a single major in the College of Liberal Arts; no more than 12 hours of conference courses and internship courses combined may be counted toward the degree.

## **Bible Courses**

Bible courses may be counted as lower-division electives in College of Liberal Arts degree programs that have room for such electives. No more than 12 semester hours of Bible courses may be counted toward any degree offered by the University.

## Admission Deficiencies

Students admitted to the University with deficiencies in high school units must remove them by the means prescribed in the *General Information Catalog* (http://catalog.utexas.edu/general-information). Contact the dean's office for further information.

#### **Correspondence and Extension Courses**

Credit that a University student in residence earns simultaneously by correspondence or extension from the University or elsewhere or in residence at another school will not be counted toward a degree in the College of Liberal Arts unless specifically approved in advance by the dean. In very special circumstances, the dean may allow a student in residence to take one or more courses by extension or correspondence. No more than 30 percent of the semester hours required for any degree offered in the College of Liberal Arts may be taken by correspondence. For additional information about correspondence work by resident students, see the *General Information Catalog* (http://catalog.utexas.edu/general-information).

## **Courses Taken on the Pass/Fail Basis**

No more than 19 semester hours of coursework completed on the pass/ fail basis may be counted toward the Bachelor of Arts, Plan II; no more than 16 semester hours of such coursework may be counted toward the other degrees in the college. In general, only electives may be taken on the pass/fail basis. Complete rules on registration on the pass/fail basis are given in the *General Information Catalog* (http://catalog.utexas.edu/ general-information).

## **Courses in a Single Field**

No more than 36 semester hours (39 for the Bachelor of Arts, Plan I) may be counted in any one field of study, including the major, unless major requirements state otherwise. No more than 36 semester hours (39 for the Bachelor of Arts, Plan I) may be counted in any one college or school other than the College of Liberal Arts or the College of Natural Sciences.

## **UTeach-Liberal Arts**

UTeach-Liberal Arts is a professional teacher preparation program for liberal arts students pursuing academic majors in Arabic, Chinese, economics, English, French, history, geography, German, government, Japanese, Latin, Middle Eastern Studies, Russian, and Spanish. Students may seek certification to teach middle school or secondary for the following certification areas:

- 1. Languages other than English, early childhood through grade 12
- 2. History, grades seven through 12
- 3. Social studies, grades four through eight or seven through 12
- 4. English language arts and reading, grades four through eight or seven through 12

UTeach-Liberal Arts offers a four-semester program for undergraduate students and a three-semester program for postbaccalaureate students. Admission into the program is required. Undergraduate students may enter the program as early as the second semester of their freshman year.

UTeach-Liberal Arts students benefit from an innovative program that emphasizes practical, hands-on field experience in local schools combined with intensive coursework. Students experience a firsthand glimpse into the world of teaching with a gradual increase in coursework requirements and internship hours throughout the length of the program. Key features of the program include cohort support, disciplinespecific pedagogical preparation, literacy training, and effective use of instructional technology. More information about UTeach-Liberal Arts and the admission process is available online (https:// liberalarts.utexas.edu/uteach).

State of Texas teacher certification requirements are governed by the Texas Education Agency and are subject to change. Students must

adhere to current teacher certification requirements, even if they differ from those listed in the University catalogs.

#### **Professional Development Sequence**

All students seeking teacher certification must complete the following courses:

Requirements		Hours	
UTL 101	Introduction to the Teaching Profession		1
UTL 202	Introduction to Teaching in the Middle School		2
UTL 640	Teaching in Secondary Schools		6
UTL 360	Problems and Principles of Secondary Education		3
UTL 670	Directed Teaching in Secondary Schools		6
ALD 322	Individual Differences		3
EDP 350G	Adolescent Development		3

# For those seeking certification for languages other than English, early childhood through grade 12:

#### **Requirements:**

See the corresponding degree plan for the language you wish to teach for other required courses: Arabic (p. 382), Chinese (p. 375), French (p. 378), German (p. 379), Japanese (p. 375), Latin (p. 376), Russian (p. 383), and Spanish (p. 381).

#### For those seeking certification in history, grades seven through 12:

Requirements		Hours	
HIS 301F	The Premodern World		3
HIS 309L	Western Civilization in Modern Times		3
HIS 315K	The United States, 1492-1865		3
HIS 315L	The United States since 1865		3
HIS 320L	Texas until 1845		3
or HIS 320P	Texas, 1845-1914		
or HIS 320R	Texas, 1914 to the Present		

For those seeking certification in social studies, grades four through eight:

Requirements		Hours	
EDC 339F	Adolescent Literacy		3
Introduction to Economic	cs Course		3
Cultural Geography Cour	se		3
Physical Geography Cou	rses		6
M 316K	Foundations of Arithmetic		3
M 316L	Foundations of Geometry, Statistics, and Probability		3
HIS 301F	The Premodern World		3
HIS 309L	Western Civilization in Modern Times		3
HIS 315K	The United States, 1492-1865		3
HIS 315L	The United States since 1865		3
HIS 320L	Texas until 1845		3
or HIS 320P	Texas, 1845-1914		
or HIS 320R	Texas, 1914 to the Present		

For those seeking certification in social studies, grades seven through 12:

Requirements		Hours	
HIS 301F	The Premodern World		3
HIS 309L	Western Civilization in Modern Times		3
HIS 315K	The United States, 1492-1865		3
HIS 315L	The United States since 1865		3
HIS 320L	Texas until 1845		3
or HIS 320P	Texas, 1845-1914		
or HIS 320R	Texas, 1914 to the Present		
GRG 301C	The Natural Environment		3
GRG 305	This Human World: An Introduction to Geography		3
Introduction to Economi	cs Course		
PSY 301	Introduction to Psychology		3

In addition to the above requirements, history majors must take:

Requirements	Hours	
Any Upper-Division Government Course		3
Any Upper-Division Government Course		3

For those seeking certification in English, grades four through eight:

Requirements		Hours	
M 316K	Foundations of Arithmetic		3
M 316L	Foundations of Geometry, Statistics, and Probability		3
Six additional hours from GEO, PS, PHY, NTR may r	n Natural Sciences (AST, BIO, CH, not duplicate)		6
EDC 339F	Adolescent Literacy		3
E 360R	Literary Studies for High School Teachers of English		3
E 364T	The English Language and Its Social Context		3
RHE 360M	Rhetoric and Writing for Teachers of English		3
Multicultural Literature in	n the American Classroom		3
Multicultural Literature in	n the American Classroom		3

For those seeking certification in English, grades seven through 12:

Requirements		Hours	
EDC 339F	Adolescent Literacy		3
E 360R	Literary Studies for High School Teachers of English		3
E 364T	The English Language and Its Social Context		3
RHE 360M	Rhetoric and Writing for Teachers of English		3
Multicultural Literature i	n the American Classroom		3
Multicultural Literature i	n the American Classroom		3

For rhetoric and writing majors seeking certification in English, grades four through eight:

Requirements		Hours	
EDC 339F	Adolescent Literacy		3
M 316K	Foundations of Arithmetic		3

M 316L	Foundations of Geometry, Statistics, and Probability	3
Six additional hours from GEO, PS, PHY, NTR may n	Natural Sciences (AST, BIO, CH, ot duplicate)	6
RHE 309S	Critical Reading and Persuasive Writing	3
RHE 325M	Advanced Writing	3
RHE 360M	Rhetoric and Writing for Teachers of English	3
E 360R	Literary Studies for High School Teachers of English	3
E 364T	The English Language and Its Social Context	3
Multicultural Literature in	the American Classroom	3

For rhetoric and writing majors seeking certification in English, grades seven through 12:

Requirements		Hours	
EDC 339F	Adolescent Literacy		3
RHE 309S	Critical Reading and Persuasive Writing		3
RHE 325M	Advanced Writing		3
RHE 360M	Rhetoric and Writing for Teachers of English		3
E 360R	Literary Studies for High School Teachers of English		3
E 364T	The English Language and Its Social Context		3
Multicultural Literature in	n the American Classroom		3

## **Program in Comparative Literature**

The program in comparative literature approaches the study of literature from a variety of viewpoints rather than from the viewpoint of a single language or nation. Courses in literary history, practical criticism, and critical theory stress the relationship between literature and other disciplines in the humanities, the arts, and the social sciences. The program offers both the doctoral and the master's degree and sponsors courses on both the graduate and the undergraduate level. All comparative literature courses are conducted in English.

To introduce undergraduates to the field of study, the comparative literature faculty has designed a cluster of courses in critical thinking and world literature. These courses concentrate on writing and thinking critically, with a focus on literary texts drawn from around the world, in the context of an interdisciplinary and international program. The 12-hour cluster complements many majors in liberal arts; with the approval of the student's major department, it may be used to fulfill the minor requirement. More information is available from the comparative literature program.

## Bachelor of Arts, Plan I

The requirements for the Bachelor of Arts under Plan I are designed to give each student flexibility in the selection of courses to meet individual needs.

A total of 120 semester hours is required. Thirty-six hours must be in upper-division courses. At least 60 hours, including 21 hours of upperdivision coursework, must be completed in residence at the University. Provided residence rules are met, credit may be earned by examination, by extension, by correspondence (up to 30 percent of the hours required for the degree), or, with the approval of the dean, by work transferred from another institution. Up to 16 semester hours of classroom and/or correspondence coursework may be taken on the pass/fail basis; this coursework may be counted only as electives.

All students must complete the University's Core Curriculum. In the process of fulfilling the core curriculum and other degree requirements, all students are expected to complete the Skills and Experience flags:

- 1. Writing: three flagged courses beyond Rhetoric and Writing 306 or its equivalent
- 2. Quantitative Reasoning: one flagged course
- 3. Global Cultures: one flagged course
- 4. Cultural Diversity in the United States: one flagged course
- 5. Ethics: one flagged course
- 6. Independent Inquiry: one flagged course

Courses that may be used to fulfill core curriculum and flag requirements are identified in the Course Schedule (http://registrar.utexas.edu/ schedules). They may be used simultaneously to fulfill other requirements, unless otherwise specified. Please note, students may not earn the cultural diversity and global cultures flags from the same course. Students are encouraged to discuss options with a departmental academic adviser.

The specific requirements for the Bachelor of Arts, Plan I, consist of prescribed work, major and minor requirements, and electives. In some cases, a course that fulfills one of these requirements may also be counted toward the core curriculum; these courses are identified below.

Courses in the major and minor may also be used to fulfill prescribed work requirements unless expressly prohibited. A course in one prescribed work area may not also be used to fulfill the requirements of another prescribed work area; the only exception to this rule is that a course that fulfills one requirement may also be used to fulfill a flag requirement.

The student must fulfill the University's General Requirements (p. 20) for graduation and the requirements of the College of Liberal Arts. University graduation requirements include a grade point average of at least 2.00 in all courses taken at the University (including credit by examination, correspondence, and extension) for which a grade or symbol other than *Q*, *W*, *X*, or *CR* is recorded; for the BA, Plan I, the student must also earn a grade point average of at least 2.00 in courses taken at the University and counted toward the major requirements. The student should also refer to the description of his or her major in the section Majors and Minors below, since some majors include higher minimum scholastic requirements.

More information about grades and the grade point average is given in the *General Information Catalog* (http://catalog.utexas.edu/generalinformation/academic-policies-and-procedures/computation-of-thegrade-point-average).

## **Prescribed Work**

- 1. Writing and Literature: English 316L, 316M, or 316N and two courses beyond Rhetoric and Writing 306 or the equivalent that carry a writing flag. One of these courses must be upper-division. Courses that carry a writing flag are identified in the *Course Schedule* (http:// registrar.utexas.edu/schedules). They may be used simultaneously to fulfill other requirements, unless otherwise specified.
- 2. *Foreign language*: Proficiency in a language other than English is required.

The study of a second language contributes in an important way to a broad education for today's students, who live in a world where the overwhelming majority of people do not speak or read English and where much of the knowledge that is disseminated may never appear in English. Knowledge of a second language is important for an appreciation of the culture of the people using that language, and it also helps students to understand the structure and complexities of their own native language. Students with sufficient preparation may be able to use the second language for study in their chosen discipline. An intermediate level of competency as determined by the completion of any one of the following options:

a. Certified proficiency on a placement or credit-by-exam test.

b. Students with previous experience in the language they plan to use to meet the language requirement must take a language placement test. A student may not select for credit a language course below this placement level without departmental permission.

c. A passing grade in a language course listed below:

Requirements		Hours	
ASL 311D	American Sign Language III: Intermediate		3
ARA 611C	Intensive Arabic II		6
BEN 312L	Second-Year Bengali II		3
CHI 612	Accelerated Second-Year Chinese		6
CHI 412L	Second-Year Chinese II		4
CZ 611C	Intensive Czech II		6
CZ 412L	Second-Year Czech II		4
DAN 612	Accelerated Second-Year Danish		6
DCH 612	Accelerated Second-Year Dutch		6
FR 611C	Intermediate French		6
GER 612	Accelerated Second-Year German Readings in Modern German		6
GK 312K	Intermediate Greek II		3
GK 312L	Intermediate Greek II: Biblical Greek		3
GK 610C	Intermediate Modern Greek		6
GK 310K	Second-Year Modern Greek II		3
HEB 612C	Intensive Biblical Hebrew II		6
HEB 611C	Intensive Hebrew II		6
HIN 312L	Second-Year Hindi II		3
ITL 611C	Intermediate Italian		6
JPN 611D	Intermediate Japanese		6
KOR 412L	Second-Year Korean II		4
LAT 311	Intermediate Latin I		3
MAL 312L	Second-Year Malayalam II		3
NOR 612	Accelerated Second-Year Norwegian		6
PSH 312L	Second-Year Pashto II		3
PRS 611C	Intensive Persian II		6
PRS 612C	Intensive Persian for Heritage Speakers		6
POL 611C	Intensive Polish II		6
POL 312L	Second-Year Polish II		3
POR 611D	Second-Year Portuguese		6
RUS 611C	Intensive Russian II		6
RUS 412L	Second-Year Russian II		4
SAN 312L	Second-Year Sanskrit II		3

S C 312L	Second-Year Bosnian/Croatian/ Serbian II	3
SEL 611C	Intensive Slavic and Eurasian Languages II	6
SEL 312L	Second-Year Slavic and Eurasian Languages II	3
SPN 611D	Second-Year Spanish	6
SPN 612	Accelerated Intermediate Spanish for Heritage Learners	6
SWA 611C	Intensive Swahili II	6
SWE 612	Accelerated Second-Year Swedish	6
TAM 312L	Second-Year Tamil II	3
TEL 312L	Second-Year Telugu II	3
TUR 611C	Intensive Turkish II	6
URD 312L	Second-Year Urdu II	3
YID 612	Accelerated Second-Year Yiddish	6
YOR 312L	Second-Year Yoruba II	3
YOR 611C	Intermediate Yoruba	6

d. Students who wish to meet the requirement with proficiency in a language not listed in the table above should contact the Texas Language Center (http://www.utexas.edu/cola/centers/tlc).

3. Social science: Three semester hours chosen from a list of approved courses, in addition to the course used to fulfill the social and behavioral sciences requirement of the core curriculum. Courses on the approved list are primarily in anthropology, economics, geography, linguistics, psychology, and sociology, but not every course in these fields is approved. Courses that are approved to count toward any core curriculum area other than social and behavioral sciences may not be counted toward this requirement.

The list is available each semester in the Student Division on the College of Liberal Arts website (http://www.utexas.edu/cola/ student-affairs/Majors-and-Degrees/Course-Lists.php).

- 4. Mathematics: Three semester hours in mathematics, excluding Mathematics 301, 316K, and 316L. Some courses that fulfill this requirement may also be counted toward the mathematics requirement of the core curriculum.
- 5. *Natural science*: Six semester hours in natural sciences, in addition to the courses counted toward the science and technology requirements of the core curriculum. Courses used to fulfill this requirement must be chosen from the fields of study listed below; no more than three hours may be in either the history of science or the philosophy of science.

To satisfy the mathematics and science and technology requirements of the core curriculum and the mathematics and natural science requirements of the BA, Plan I, a student may count (1) no more than 12 hours in mathematics, computer science, and statistics and scientific computation combined; and (2) no more than nine hours in any single field of study.

- a. Astronomy
- b. Biology
- c. Chemistry
- d. Geological sciences
- e. Marine science
- f. Nutrition

- g. Physical science
- h. Physics
- i. Mathematics (excluding Mathematics 301), computer science, statistics and data sciences
- j. Other alternative science courses approved by the dean
- k. Approved alternative courses in history of science and philosophy of science

Lists of approved courses in science and the history and philosophy of science are available each semester in the Student Division and on the College of Liberal Arts website (http://www.utexas.edu/cola).

6. *Cultural expression, human experience, and thought*: Three semester hours chosen from a list of approved courses. The course(s) must be in a field of study taught in the College of Liberal Arts. A course counted toward any requirement of the core curriculum may not also be counted toward this requirement.

A list of approved courses is available each semester in the Student Division and on the College of Liberal Arts website (http://www.utexas.edu/cola).

#### **Electives**

In addition to the core curriculum, prescribed work, and major and minor, the student must complete enough elective coursework to provide the 120 semester hours required for the degree. These 120 hours may include no more than 12 hours of conference courses and internship courses combined as described in Conference Courses and Internship Courses (p. 370); 12 hours of Bible courses; nine hours of designated coursework in air force science, military science, or naval science; 16 hours completed on the pass/fail basis; 39 hours in any one field of study in the College of Liberal Arts or the College of Natural Sciences, unless major requirements state otherwise; and 39 hours in any other single college or school of the University. Mathematics courses at the level of college algebra may not count toward elective hours.

# **Majors and Minors**

#### **Major Requirements**

The Bachelor of Arts, Plan I, requires the completion of all requirements for one major. The number of semester hours required in the major varies with the field selected. Unless the requirements of the major state otherwise, a major consists of at least 24 but no more than 42 semester hours, with at least 15 hours in upper-division courses. Of these 15 hours, six must be taken in residence. At least 18 hours of coursework in the major, including six hours of upper-division coursework, must be completed in residence at the University.

#### Minors

Students in majors requiring fewer than 36 semester credit hours must also fulfill the requirements of a minor. The minor consists of a specific number of semester hours of coursework completed outside the student's major field. The requirements of the minor are established by the offering department. Only one minor may be declared per major. Before planning to use a course to fulfill the minor requirement, the student should consult the department that offers the course.

At least nine of the hours required for the minor must include coursework not used to satisfy the requirements of the student's major. Courses used to fulfill the requirements for a minor must be taken on the lettergrade basis, and half of the required semester hours must be taken in residence.

# African and African Diaspora Studies

#### Major

Twenty-four semester hours of coursework in African and African diaspora studies, including at least 15 hours of upper-division coursework. The following courses are required:

- 1. African and African Diaspora Studies 303, *Introduction to Black Studies*
- 2. African and African Diaspora Studies 375, Community Internship
- 3. African and African Diaspora Studies 376, Senior Seminar
- 4. Three upper-division courses (at least nine semester hours) chosen from one of the following tracks:
  - a. Critical race, gender, and sexuality theories
  - b. Performance, music, art, and literature
  - c. Language, history, and behavioral and social sciences
  - d. Law, education, health, and policy
- 5. Six additional semester hours of African and African diaspora studies coursework

A list of courses for each track is available from the undergraduate adviser. Coursework used in requirements 4 and 5 must cover at least two geographical regions of the African diaspora, identified as Africa, the Caribbean, Latin America, and the United States. A list of courses with their geographical affiliation is available in the departmental advising office.

# **American Studies**

## Major

Twenty-seven semester hours of coursework in American studies, including at least 15 hours of upper-division coursework. The following courses are required:

- 1. American Studies 310, Introduction to American Studies
- 2. American Studies 311S, Introductory Seminar in American Studies
- 3. American Studies 355, *Main Currents of American Culture to 1865* and American Studies 356, *Main Currents of American Culture since 1865*
- 4. Nine semester hours chosen from topics of American Studies 370, *Seminar in American Culture*
- 5. Three additional hours of American studies coursework
- 6. Liberal Arts 320 or three additional hours of American studies coursework.

# Anthropology

## Major

Thirty-three semester hours of anthropology, including at least 18 hours of upper-division coursework, consisting of

- 1. Anthropology 301, 302, 304, and 307
- 2. At least three semester hours of upper-division coursework in each of the following areas

- a. Theory: Anthropology 330C or an approved alternate course
- b. Methods: Anthropology 453, 662, 462M, or an approved alternate course
- c. Culture/geographic area
- 3. Twelve additional hours, including at least nine hours of upperdivision coursework

A list of the courses in each area of requirement 2 is available from the anthropology adviser.

# **Asian American Studies**

#### Major

- 1. Asian American Studies 301 or 312.
- Three semester credit hours, chosen from one of the following:
   a. Asian American Studies 310 (approved topics)
  - b. Asian American Studies 314
- 3. Fifteen semester hours, of upper-division coursework in Asian American Studies, divided between two of the following tracks (Courses in each track are available at the Center for Asian American Studies (https://liberalarts.utexas.edu/aas)):
  - a. Culture, Literature, and Media Studies
  - b. Economics, History, and Government
  - c. Social Sciences
  - d. Public Policy
- 4. Asian American Studies 377

# Asian Cultures and Languages

The Bachelor of Arts with a major in Asian cultures and languages is offered with specialization in Chinese, Japanese, Korean, Hindi/Urdu, Bengali, Malayalam, Sanskrit, or Tamil.

#### Major

Twenty-four semester hours, including 21 hours of upper-division coursework, in the language and culture of one of the following areas of specialization. A list of approved Asian studies courses related to the areas of specialization is available in the Department of Asian Studies. No more than three hours of internship coursework may be counted toward the major. NOTE: Twenty-four semester hours, including 18 hours of upper-division coursework, are required for the specialization in Japanese.

- 1. Chinese
  - a. Chinese 322 or 341
  - b. Three semester hours chosen from Chinese 320L, 330, and 340
  - c. Six additional semester hours of upper-division coursework in Chinese
  - d. Twelve additional semester hours in Asian studies courses related to China, at least six hours of which must be upperdivision
- 2. Japanese
  - a. Japanese 317C
  - b. Japanese 320K and 320L
  - c. Japanese 330
  - d. Three additional semester credit hours of upper-division coursework in Japanese
  - e. Nine additional semester credit hours in Asian studies courses related to Japan, at least six hours of which must be upperdivision

- 3. Korean
  - a. Asian Studies 302D
  - b. Twelve semester hours of upper-division coursework in Korean
  - c. Nine additional upper-division semester hours in Asian studies courses related to Korea
- 4. Hindi/Urdu
  - a. Twelve semester hours of upper-division coursework in Hindi and/or Urdu
  - b. Twelve additional semester hours in Asian studies courses related to South Asia, at least six hours of which must be upperdivision. Three semester hours of upper-division coursework in Hindi, Urdu, or Sanskrit may be counted toward this requirement.
- 5. Bengali
  - a. Nine semester hours of upper-division coursework in Bengali
  - b. Fifteen additional semester hours in Asian studies courses related to South Asia, six hours of which must be upper-division. Three semester hours of upper-division coursework in Tamil, Sanskrit, Bengali, or Malayalam may be counted toward this requirement.
- 6. Malayalam
  - a. Nine semester hours of upper-division coursework in Malayalam
  - b. Fifteen additional semester hours in Asian studies courses related to South Asia, at least six hours of which must be upperdivision. Three semester hours of upper-division coursework in Malayalam, Sanskrit, Bengali, or Tamil may be counted toward this requirement.
- 7. Sanskrit
  - a. Nine semester hours of upper-division coursework in Sanskrit
  - b. Fifteen additional semester hours in Asian studies courses related to South Asia, six hours of which must be upper-division. Three semester hours of upper-division coursework in Sanskrit, Hindi, or Urdu may be counted toward this requirement.
- 8. Tamil
  - a. Nine semester hours of upper-division coursework in Tamil
  - b. Fifteen additional semester hours in Asian studies courses related to South Asia, six hours of which must be upper-division. Three semester hours of upper-division coursework in Tamil, Sanskrit, Bengali, or Malayalam may be counted toward this requirement.

# **Asian Studies**

## Major

Twenty-four semester hours of Asian studies coursework, at least 18 of which must be upper-division, in one of the two areas of specialization listed below. Students specializing in East Asia must choose either the general track or the Taiwan track. No more than six hours of internship coursework may be counted toward the major. Courses counted toward the foreign language requirement may not also be counted toward the major unless otherwise noted. A list of courses that fulfill the requirements of the areas of specialization is available in the Department of Asian Studies.

- 1. East Asia
  - a. General track
    - i. At least three semester hours of coursework in East Asian history
    - ii. A three-hour Asian studies course related to South Asia
    - iii. Asian Studies 379
    - iv. Fifteen additional semester hours in Asian studies courses related to East Asia, preferably in more than one East Asian cultural area. Six semester hours of upper-division

coursework in Chinese, Japanese, or Korean language may be counted toward this requirement.

- v. Two years of Chinese, Japanese, or Korean to fulfill the foreign language requirement
- b. Taiwan track
  - i. At least three semester hours of coursework in Taiwanese history
  - ii. A three-hour Asian studies course related to South Asia
  - iii. Asian Studies 379
  - iv. Fifteen additional semester hours in Asian studies courses related to East Asia, including at least six hours related to Taiwan, three hours related to China, three hours related to Japan, and three hours in upper-division Asian studies courses related to East Asia or in upper-division Chinese language courses
  - v. Two years of Chinese language to fulfill the foreign language requirement, focusing in these courses on the traditional characters used in Taiwan
- 2. South Asia
  - a. At least three semester hours of coursework in South Asian history
  - b. A three-hour Asian studies course related to East Asia
  - c. Asian Studies 379
  - d. Fifteen additional semester hours in Asian studies courses related to South Asia. Six semester hours of upper-division coursework in Bengali, Hindi, Malayalam, Pashto, Sanskrit, Tamil, Telugu, or Urdu language may be counted toward this requirement.
  - e. Two years of Bengali, Hindi, Malayalam, Pashto, Sanskrit, Tamil, Telugu, or Urdu to fulfill the foreign language requirement

# **Classical Languages**

## Major

Twenty-four semester hours in the languages and cultures of one of the following areas of specialization: Classics, Greek, or Latin.

- 1. Classics
  - a. Six hours of upper-division Greek
  - b. Six hours of upper-division Latin
  - c. Classical Civilization 375, Greek 365, or Latin 365
  - d. Nine additional hours of Greek, Latin, classical civilization, and Ancient History and Classical Civilization 325 or 378, including at least three upper-division hours
- 2. Greek
  - a. Twelve hours of upper-division Greek, including Greek 365
  - Twelve hours of Latin, classical civilization, and Ancient History and Classical Civilization 325 or 378, including at least nine in upper-division coursework
- 3. Latin
  - a. Fifteen hours of upper-division Latin, including Latin 324 and Latin 365
  - b. Nine hours of Greek, classical civilization, and Ancient History and Classical Civilization 325 or 378, including at least six in upper-division coursework

# **Classical Studies**

## Major

Thirty-six semester hours of coursework, at least 21 of which must be upper-division, in one of the two areas of specialization, ancient history or classical archaeology, listed below. Coursework counted toward the foreign language requirement may not also be counted toward the major.

- 1. Ancient History
  - a. Six hours of premodern history, chosen from topics of Ancient History and Classical Civilization 310 and 330.
  - b. Nine hours of upper-division Greek and/or Roman history, chosen from topics of Ancient History and Classical Civilization 325.
  - c. Twelve hours of classical civilization, Greek, Latin, or topics of Ancient History and Classical Civilization 319, 325, and 378.
  - d. Six hours of upper-division coursework in Greek and/or Latin.
  - e. Ancient History and Classical Civilization 378.
- 2. Classical Archaeology
  - a. Nine hours of coursework in classical archaeology chosen from Classical Civilization 307C, 307D, or 307K; 317 and 340.
  - b. Three hours of approved coursework in archaeological techniques and analysis. A list of approved courses is available in the Department of Classics.
  - c. Three hours of upper-division coursework in Greek or Roman history, chosen from topics of Ancient History and Classical Civilization 325 and 378.
  - d. Three hours of approved upper-division coursework in ancient art history. A list of approved courses is available in the Department of Classics.
  - e. Six hours of upper-division coursework in either Greek or Latin.
  - f. Twelve additional hours of coursework chosen from Anthropology 304, 304T, approved topics of Middle Eastern Studies 342, Religious Studies 354D, Greek, Latin, and the areas listed in requirements (2a) through (2e).
  - g. Fieldwork experience approved by the classical studies faculty adviser.

# Economics

All economics majors must earn grades of at least *C*- in Mathematics 408K and 408L. The following combinations of courses alternatively satisfy the math requirement, with a grade of at least a C- in each course: Mathematics 408C and 408D, Mathematics 408N and 408S, Mathematics 408K and 408S, Mathematics 408C and 408L. Mathematics 408C and 408S, or Mathematics 408N and 408L. Mathematics 403K and 403L (and transfer equivalents) may not be substituted for the required mathematics courses.

## Major

At least 28 semester hours of economics, consisting of Economics 304K, 304L, 420K, 320L, 329, 341K or 441K, and nine additional hours of upperdivision coursework. At least six of the additional semester hours of upper-division coursework must be in courses for which a grade of at least *C*- in Economics 420K is a prerequisite. Economics 420K, 320L, 329, and 341K or 441Kmust be completed in residence. Economics majors must take Economics 420K at least two semesters prior to completion of the degree. All economics majors must earn a grade of at least *C*- in each course counted toward fulfillment of the major requirements, except Economics 329, in which a grade of at least C is required. Economics 329 with a grade of at least C is a prerequisite for Economics 420K. A minimum grade point average of at least 2.00 in all courses taken at the University and counted toward the major is also required.

No student may register for more than 10 semester hours of economics in any one semester without approval of an undergraduate adviser in the Department of Economics.

# English

## Major

Thirty-three semester hours of English, including at least 21 semester hours of upper-division coursework consisting of the following:

- 1. An introductory literary skills course, chosen from English 314J , 314L , or 314V
- An introductory literary survey course, chosen from English 316L , 316M , 316N , or 316P
- 3. A diverse perspectives course
- 4. A course in literature or language from 1940 to the present
- 5. An upper-division course in literature or language from 1830 to 1940
- 6. An upper-division course in literature or language from 1630 to 1830
- 7. An upper-division course in literature or language prior to 1630
- 8. An upper-division single- or dual-author course
- 9. Nine additional semester hours of upper-division coursework in English

A list of courses that may be used to fulfill requirements is available in the English Advising Office, Parlin Hall 114, and on the Department of English website (https://liberalarts.utexas.edu/english).

The student must make a grade of at least *C*- in each course counted toward fulfillment of the major requirements. A minimum grade point average of 2.00 in courses taken at the University and counted toward the major is also required.

Students are discouraged from taking more than six semester hours of coursework in English in a semester. No student may take more than nine hours of coursework in English in a semester.

# **Ethnic Studies**

The ethnic studies program is administered by the Center for Asian American Studies. The director and executive committee of this center advises students, prescribes groups of courses that fulfill content requirements, and authorizes course substitutions when appropriate. Students majoring in ethnic studies must meet the requirements of the concentration as outlined in Asian American Studies (p. 375).

# **European Studies**

Students select one of three tracks: (I) European studies with a focus on pre-1700 Europe, (II) European studies with a focus on post-1700 Europe, or (III) European studies with a focus on European thought. The tracks are interdisciplinary in nature and draw on courses in many departments and allow students considerable opportunity to shape their coursework around their interests.

Students majoring in European studies must complete six semester hours of upper-division coursework in one of the following languages: Czech, Danish, Dutch, French, German, modern Greek, Italian, Norwegian, Polish, Portuguese, Serbian/Croatian, Spanish, or Swedish. With permission from the director of the Center for European Studies, however, students may study other languages for their major—such as Arabic, Persian, Hindi, Hebrew, Turkish, Russian, Latin, or ancient Greek—when an application of those language skills will significantly enhance their work as distinctly European studies scholars in their track. Courses taught in English may not be used. Courses used to fulfill the European studies language requirement will be counted toward the major.

#### Major

Thirty semester hours of coursework in European studies, at least 24 of which must be upper-division, consisting of the following. No more than nine hours of coursework counted toward the major may focus on a single country or culture.

- 1. European Studies 305, Introduction to European Studies
- 2. European Studies 350, *Governments and Politics of Western Europe* or Government 351D, *The Theoretical Foundations of Modern Politics*
- 3. Completion of one of the following tracks:
  - A. Track I: European studies with a focus on pre-1700 Europe
    - i. Three hours in each of the following two areas:
      - a. European Studies 306, Introductory Topics in European Anthropology, Geography, History, and Sociology; or European Studies 346, Topics in European Anthropology, Geography, History, and Sociology, chosen from an approved list
      - b. European Studies 307, *Introductory Topics in European Culture, Literature, Art, Music, and Media;* or European Studies 347, *Topics in European Culture, Literature, Art, Music, and Media,* chosen from an approved list
    - ii. Nine additional hours of European studies coursework chosen from an approved list on the Center's website, only three hours of which may be lower-division
  - B. Track II: European studies with a focus on post-1700 Europe
  - i. Three hours in each of the following three areas:
    - a. European Studies 306, Introductory Topics in European Anthropology, Geography, History, and Sociology; or European Studies 346, Topics in European Anthropology, Geography, History, and Sociology, chosen from an approved list
    - b. European Studies 307, *Introductory Topics in European Culture, Literature, Art, Music, and Media*; or European Studies 347, *Topics in European Culture, Literature, Art, Music, and Media*, chosen from an approved list
    - c. European Studies 308, *Introductory Topics in European Economics, Government, Business, and Policy;* or European Studies 348, *Topics in European Economics, Government, Business, and Policy*
    - ii. Six additional hours of European studies coursework chosen from an approved list on the Center's website, only three hours of which may be lower-division
  - C. Track III: European studies with a focus on European thought i. Three hours in each of the following three areas:
    - 1. European intellectual history or philosophy, chosen from History 309K or 309L, Philosophy 349, or an approved list.
    - 2. Religion, chosen from Core Texts and Ideas 304, History 343, Religious Studies 304, 318, or from an approved list.
    - 3. History of science, mathematics, technology, or medicine chosen from History 322D, 322G, 322M, or from an approved list.
    - ii. Six hours of additional coursework in European thought, chosen from an approved list on the Center's website, only three hours of which may be lower-division.

- 4. European Studies 375, *Capstone Research in European Studies*, in which the student prepares a thesis
- 5. Participation in an approved study abroad program or in an approved internship in Europe selected from a list available from the European studies faculty adviser

# **French Studies**

#### Major

Twenty-four semester hours of upper-division French, including

- 1. French 320E, 322E
- 2. Six hours of French courses chosen from French 325C, *Crisis and Conflict*; French 325D, *Self and Society*; and French 325E, *Representing Difference*. No more than six hours chosen from item 2 may be counted for the major. No more than three hours from item 2 may be counted for the major for students with credit for either French 326K, *Introduction to French Literature I: From the Middle Ages through the Eighteenth Century*; or French 326L, *Introduction to French Literature II: From the French Revolution to the Present*. Students with credit for French 326K and 326L may not count the courses in item 2 toward the major.
- 3. Six hours of French courses numbered 350 or above
- 4. Six hours of additional French upper-division. Up to three hours of French Civilization may be counted for three hours of additional French upper-division. Up to three hours of Liberal Arts 320 may be counted for three hours of additional French upper-division.

Only one may be counted for the Major. Liberal Arts 321F, three hours of French Civilization, French 349P, French 358Q.

# Geography

## Major

Thirty semester hours of geography, at least 18 of which must be upperdivision, including

- 1. An 18 hour core requirement consisting of:
  - a. Geography 301C and one other course in physical geography
  - b. Geography 305 and one other course in human geography
  - c. Two geography courses in methods/techniques
- 2. At least nine semester hours in one of the following tracks:
  - a. Geographic information science
  - b. Cultural geography
  - c. Sustainability
  - d. General geography (designed for students who do not wish to specialize at the undergraduate level)
  - e. Urban geography
  - f. Earth science
  - g. Landscape ecology and biogeography

Courses used to fulfill the core geography requirement may not be counted toward the completion of a track. Lists of courses that fulfill the core geography requirement and of courses in each track are available in the Department of Geography and the Environment.

# German

## Major

Twenty-four semester hours of upper-division coursework in German, consisting of:

- 1. German 328
- 2. Three additional semester hours in language, chosen from German 330C, or 331L
- 3. Nine semester hours in literature, culture, and linguistics, chosen from German 340C, 343C, 346L, and 347L
- Six semester hours of topic seminars, chosen from German 363K, 369, and 373
- 5. Three additional semester hours in German, chosen from German 340C, 343C, 346L, 347L, 348D, 363K, 369, or 373

Eighteen of the 24 semester hours must be taken in residence. German 149T, 249T, and 349T may not be counted toward a major in German.

# German, Scandinavian, and Dutch Studies

#### Major

Twenty-seven semester hours of coursework in German Scandinavian, and Dutch studies, including:

- 1. German, Scandinavian, and Dutch Studies 301
- 2. One tools course: language for research
  - a. One upper-division course in the same Germanic language used to fulfill the foreign-language requirement (usually German 328 or Norwegian 328); or
  - b. One language course in a second modern Germanic language (usually 604 or the equivalent); or
  - c. One course in an older Germanic language (Old Norse, Middle-High German, Gothic, etc.)
- One foundations course out of three areas: film studies, narrative/ textual studies, or linguistics that stresses methodology/theory as well as content areas, chosen from an approved list
- 4. Five additional German, Scandinavian, and Dutch studies courses
  - a. Only one course may be lower-division
  - b. Additional foundations courses may be used to fill this requirement
  - c. Upper-division German courses may be substituted for up to three of the five German, Scandinavian, and Dutch studies courses; German 328 may not be used to fulfill this requirement
  - d. Other substitutions may be approved by the German, Scandinavian, and Dutch studies adviser.
- 5. German, Scandinavian, and Dutch Studies 377, *Capstone Research in German, Scandinavian, and Dutch Studies*

# Government

## Major

Thirty semester hours of government, at least 18 of which must be upper-division.

Students may satisfy the requirements of the major by taking one of the following two sequences:

I. At least one upper-division course from each of three of the seven fields into which the department's work is divided:

- 1. political theory
- 2. American government and politics
- 3. public and comparative law
- 4. public policy
- 5. comparative politics
- 6. international relations
- 7. research methods

II. At least 12 hours in one of four tracks:

- 1. political and legal thought
- 2. US politics and policy
- 3. world politics
- 4. methods of inquiry

The political and legal thought track includes courses in fields 1 and 3; the US politics and policy track includes courses in fields 2 and 4; the world politics track includes courses in fields 5 and 6; and the methods of inquiry track includes courses in field 7.

Lower division hours other than Government 310L, 312L, and 312P may be used to satisfy the required twelve hours in a track.

Government majors must also take at least one three hour research seminar or internship course in government.

All Government courses that satisfy the Independent Inquiry Flag count as government research seminars.

Government internship courses include Government 362L, *Government Research Internship*; Government 662L, *Government Research Internship*; Government 371N, *Administrative Internship*; Government 372N, *Campaigns and Elections Internship*; Government 373N, *Legislative Internship*; and Government 374N, *Political Internship*.

Government majors must also complete at least three semester hours in a tools course, chosen from Government 339L, *Research Methods in Government;* Government 341M, *Decision Theory; Government 342N, Public Choice*; and Government 350K, *Statistical Analysis in Political Science*.

Students may choose to satisfy the tools course requirement by completing one of the following non-government course options; these courses may not be counted toward the semester hours and grade point average required for the major.

- a. Three semester hours of statistics chosen from Economics 329; Educational Psychology 371; Psychology 418; Social Work 318; Sociology 317L; Statistics 309; Statistics and Data Sciences 301, 302, 304, 305, 306
- b. Three semester hours of logic, chosen from Philosophy 312, 313, 313K, 313Q; Tutorial Course 310 (for Plan II students)
- c. Six semester hours of upper-division coursework in one foreign language, excluding courses conducted in English

All government majors must earn a grade of at least *C*- in each course counted toward fulfillment of the major requirements. A minimum grade point average of 2.00 in courses taken at the University and counted toward the major is also required.

No more than six hours of internship coursework may be counted toward the major, including transfer credit earned in internship courses at other institutions of higher education.

No student may register for more than nine semester hours of government in one semester without the consent of an undergraduate adviser in the Department of Government.

# **Health and Society**

## Major

Thirty semester credit hours, including at least 15 hour of upper-division coursework, consisting of:

- 1. Health and Society 301, Introduction to Health and Society
- 2. Three semester hours in each of the following:
  - a. Biology: three semester hours, chosen from Biology 301D, Biology for Business, Law, and Liberal Arts, Biology 301L, Molecules to Organisms, Biology 311C, Introductory Biology I, Biology 309D, The Human Body
  - b. Social/behavioral epidemiology: three semester hours in Health Education 343, *Foundations of Epidemiology*
  - c. Methods and statistics: three semester hours, chosen from an approved list
  - d. Social justice and health: three semester hours, chosen from an approved list
- 3. Nine semester hours, chosen from an approved list, in one of the following tracks:
  - a. Health and behavior
  - b. Cultural aspects of health
  - c. Health care and the economy
  - d. Population health
- 4. Three additional semester hours, chosen from any course offered from any of the tracks listed above.
- Health and Society 378, Seminar in Health and Society; or, for students seeking special honors, Health and Society 679HA and 679HB, Honors Tutorial Course

## **History**

#### Major

Thirty semester hours of history, at least 15 hours of which must be upper-division and 21 hours of which must be in residence, including

- 1. History 318W, *Thinking Like a Historian*. Lower-division history methods course
- 2. At least six semester hours in United States history, of which at least three hours must be completed in residence
- At least 12 semester hours of history chosen from each of four of the following specific geographic areas: Africa; Asia; Europe; Latin America; Middle East; or Transnational
- 4. At least six semester hours must be designated as Pre-1800 history
- 5. History 378W, Capstone in History

## Human Dimensions of Organizations

#### Major

Thirty semester hours of human dimensions of organizations, at least 18 of which must be upper-division, including:

- 1. Human Dimensions of Organizations 301
- 2. Human Dimensions of Organizations 320
- 3. At least three hours in each of the following four fields, three hours of which must be upper-division. Lists of courses are available in the adviser's office:
  - a. Data and analytical methods
  - b. Qualitative reasoning
  - c. Creativity and innovation
  - d. Culture and communication
- 4. Nine additional upper-division semester hours from a single field from item 3, above
- 5. Human Dimensions of Organizations 379

## **Humanities**

#### Major

Forty-two semester hours, including at least 30 hours of upper-division coursework, arranged by contract in consultation with the humanities adviser. None of these 42 hours may be counted toward the core curriculum or the prescribed work for the Bachelor of Arts degree.

Students normally enter the program in the sophomore or junior year. In developing the contract, the student and the adviser define objectives, central subject areas, and a general plan of study, structured in accordance with the student's interests. With the approval of the humanities adviser, the student chooses one of the following tracks:

- 1. Track One
  - a. Nine semester hours in a single field of study in the College of Liberal Arts
  - b. Nine hours in one or more other fields of study in the College of Liberal Arts
  - c. Nine hours in any field or fields outside the College of Liberal Arts
  - d. Nine additional hours in any field or fields at the University
  - e. Six hours of upper-division coursework in humanities, including Humanities 370
- 2. Track Two
  - a. Twelve semester hours in a single field of study in the College of Liberal Arts
  - b. Nine hours in a second field of study in the College of Liberal Arts
  - c. Fifteen additional hours in any field or fields at the University
  - d. Six hours of upper-division coursework in humanities, including Humanities 370

Students in the Humanities Honors Program must use Humanities 679HA and 679HB to fulfill requirements 1e or 2d.

## Iberian and Latin American Languages and Cultures

#### Major

- 1. Three semester hours of grammar and writing: Spanish 327C, Advanced Grammar and Writing in Context, Spanish 327N, Academic Writing for Heritage Speakers, or Portuguese 327C, Advanced Grammar and Writing in Context
- 2. One introductory course in language and linguistics in society: Spanish 330L, *Introduction to Language and Linguistics in Society*, or Portuguese 330L, *Introduction to Language and Linguistics in Society*
- 3. One introductory course in literatures and cultures: Spanish 328C, *Introduction to Literatures and Cultures*, or Portuguese 328C, *Introduction to Literatures and Cultures*
- 4. Fifteen additional semester hours of coursework in Spanish, Portuguese, or Spanish and Portuguese
  - a. Students completing the majority of their coursework in Spanish must take at least one course in Portuguese or Portuguese civilization (PRC). Students completing the majority of their coursework in Portuguese must take at least one course in Spanish or Spanish civilization (SPC).
- 5. One capstone seminar, chosen from the following: a. Spanish 379L, *Capstone Seminar in Linguistics* 
  - b. Portuguese 379L, Capstone Seminar in Linguistics
  - c. Spanish 379C, Capstone Seminar in Literatures and Cultures
  - d. Portuguese 379C, Capstone Seminar in Literatures and Cultures

# International Relations and Global Studies

## Major

Forty-five semester hours of coursework, at least 30 of which must be upper-division, consisting of the following:

- Twelve hours in the following five core courses in the major.
   a. International Relations and Global Studies 301
  - b. A three-semester-hour course chosen from Economics 301, Introduction to Economics or Economics 304L, Introduction to Macroeconomics
  - c. Geography 305, This Human World: An Introduction to Geography
  - d. A three-semester-hour course chosen from Anthropology 302, Cultural Anthropology or Sociology 302, Introduction to the Study of Society
- 2. International Relations and Global Studies 320F, Foundations of International Relations and Global Studies
- Nine hours, including six upper-division, in a single area: Asian Studies, European Studies, Latin American Studies, Middle Eastern Studies, Russian, Eurasian, and East European Studies, approved list of African studies, or another regional area approved by IRG director.
- Twelve hours of upper-division coursework in one of the following tracks, chosen from a list of approved courses available in the advising office:
  - a. Culture, media, and the arts
  - b. International security

- c. Science, technology, and environment
- d. International political economy
- 5. Six hours of upper-division coursework in a single foreign language
- 6. International Relations and Global Studies 378, *Capstone Research in International Relations and Global Studies;* or, for students seeking special honors, International Relations and Global Studies 678H, *Honors Tutorial Course*

International relations and global studies majors must participate in an approved study abroad program. A list of approved programs is available from the faculty adviser. A student who graduated from an international high school may petition to be excused from this requirement. Documentation is required, and the petition must be approved by the faculty adviser and the associate dean for academic affairs.

A grade of at least C- is required for International Relations and Global Studies 301, Introduction to International Relations and Global Studies, International Relations and Global Studies 320F, Foundations of International Relations and Global Studies, and International Relations and Global Studies 378, Capstone Research in International Relations and Global Studies.

# **Islamic Studies**

## Major

Twenty-four semester hours of coursework in Islamic studies, including 18 hours of upper-division coursework. The coursework consists of

- 1. Islamic Studies 310, Introduction to Islam
- Three semester hours chosen from Islamic Studies 311 (Topic 2: Judaism, Christianity, and Islam: An Introduction); Religious Studies 305, Introduction to the Philosophy of Religion; Religious Studies 310, Introduction to the Study of Religion
- 3. Nine semester hours in Islamic Studies 340, Topics in Islam
- 4. Six semester hours in Islamic Studies 372, Topics in Islamic Cultures
- 5. Three additional semester hours of upper-division coursework in Islamic studies

Students must complete the equivalent of at least two years in Arabic, Persian, Turkish, Urdu, or Yoruba. Credit used to fulfill this requirement may also be used to fulfill the foreign language requirement.

# **Italian Studies**

## Major

Twenty-four semester hours of upper-division coursework in Italian, including:

- 1. Italian 320
- 2. Three hours in Italian courses chosen from Italian 321 or 325C or 328
- 3. Three hours in Italian Civilization
- 4. Fifteen hours in additional Italian upper-division. Up to three hours of Italian Civilization may be counted for three hours of additional Italian upper-division. Up to three hours of Liberal Arts 320 may be counted for three hours of additional Italian Civilization

Only one may be counted for the Major. Liberal Arts 321 J, three hours of additional Italian Civilization, Italian 349P, Italian 358Q.

# **Jewish Studies**

## Major

Twenty-seven semester hours of coursework in Jewish studies, including Jewish Studies 304M or 304N, at least three additional hours of lowerdivision coursework, and 18 hours of upper-division coursework. Students must complete six hours in each of the following areas:

- 1. Humanities and arts: Jewish Studies 363 and comparable courses identified by the faculty adviser
- 2. History and social science: Jewish Studies 364, 365, and comparable courses identified by the faculty adviser

Students are encouraged but not required to use Hebrew or Yiddish to fulfill the foreign language requirement.

# Latin American Studies

## Major

Twenty-seven semester hours, at least 18 hours of which must be upperdivision, including:

- 1. Latin American Studies 301
- 2. Latin American Studies 337M
- 3. One of the following social sciences: Latin American Studies 315, 319, 324L, 325, 330, 355
- 4. Latin American Studies 366
- 5. Three hours, chosen from the following: Latin American Studies 326, 327, 328, 370P , or 370S
- 6. Nine additional hours of Latin American studies, of which six must be upper-division
- 7. Latin American Studies 378

Students must achieve an intermediate level of competency in Spanish, Portuguese, or an indigenous language of Latin America. Credit used to fulfill this requirement may also be used to fulfill the foreign language requirement.

# Linguistics

## Major

Twenty-seven semester hours of coursework in linguistics, consisting of Linguistics 306, 344K, 345, 372K, 372L, and 12 additional hours of coursework in linguistics, nine hours of which must be upper-division. Students should consult the undergraduate adviser for information about counting other courses toward the major requirements.

# Mexican American and Latina/o Studies

## Major

Twenty-seven semester credit hours total, including 18 hours upperdivision and 18 hours in residence:

- 1. Mexican American Studies 301, Introduction to Mexican American and Latina/o Studies
- 2. Three semester credit hours, chosen from Mexican American Studies 307, *Introduction to Mexican American Cultural Studies*, Mexican American Studies 308, *Introduction to Mexican American Policy Studies*, or Mexican American Studies 309, *Bilingualism in the Americas*
- 3. Three semester credit hours, chosen from Mexican American Studies 361, *Mexican American Cultural Studies Seminar*, Mexican American Studies 362, *Mexican American Policy Studies Seminar*, and Mexican American Studies 363, *Sociolinguistics in Mexican American and Latina/o Studies*
- 4. Capstone, Mexican American Studies 378
- Completion of one of the following is required.
   a. Internship
  - b. Study Abroad (approved)

Students majoring in Mexican American and Latina/o Studies must achieve, at a minimum, an intermediate level of proficiency in Spanish, Portuguese, or a relevant Indigenous language.

# Middle Eastern Languages and Cultures

The major in Middle Eastern languages and cultures is offered with specialization in one of two tracks: literature and culture, or language.

#### Major

Twenty-four semester hours, at least 21 of which must be upper-division, consisting of the following:

- 1. Middle Eastern Languages and Cultures 301
- 2. Middle Eastern Languages and Cultures 323
- 3. Six semester hours of upper-division coursework in a single Middle Eastern language, chosen from Arabic, Hebrew, Persian, or Turkish, but excluding coursework conducted in English
- 4. An additional 12 semester hours of upper-division coursework in one of the following tracks:
  - a. Literature and culture: Middle Eastern languages and cultures coursework in Arabic-, Hebrew-, Persian-, and Turkish-speaking cultures and literatures
  - b. Language: upper-division language coursework in Arabic, Hebrew, Persian, or Turkish; may be in a second Middle Eastern language, but excluding coursework conducted in English

# **Middle Eastern Studies**

## Major

Twenty-four semester hours of coursework in Middle Eastern studies, 18 hours of which must be upper-division coursework, consisting of the following:

- 1. Middle Eastern Studies 301K and 301L
- 2. Six semester hours of upper-division coursework in a Middle Eastern language (Arabic, Hebrew, Persian, or Turkish)
- 3. Three semester hours of upper-division coursework in each of the following areas:

- a. Social science: Middle Eastern Studies 341, *Topics in the Middle East: Social Science*.
- b. Arts and humanities: Middle Eastern Studies 342, *Topics in the Middle East: Arts and Humanities*.
- c. History: Middle Eastern Studies 343, *Topics in the Middle East: History.*
- 4. Three additional semester hours of upper-division coursework in Middle Eastern studies.

Students must complete the equivalent of at least two years of a Middle Eastern language (normally Arabic, Hebrew, Persian, or Turkish). Credit used to fulfill this requirement may also be used to fulfill the foreign language requirement.

# Philosophy

## Major

Thirty semester hours of philosophy, at least 18 of which must be upperdivision, including

- 1. Three hours of symbolic logic: Philosophy 313, 313K, or 313Q
- 2. Philosophy 329K or 329L, which may also be counted toward requirement 3 or 4 below
- 3. Three hours of ancient philosophy: Philosophy 301K or 329K
- 4. Three hours of early modern philosophy: Philosophy 301L or 329L
- 5. Six hours chosen from Philosophy 321K, 323K, 323M, 325K, and 332

# Psychology

#### Major

Twenty-eight semester hours of psychology, at least 18 of which must be upper-division, including Psychology 301 and 418 with a grade of at least *C* in each. Students may take courses from a variety of areas within the field of psychology, including clinical psychology, cognition, developmental psychology, evolutionary psychology, language, neuroscience, perception, and social psychology.

Psychology majors must earn a grade of at least *C* in Psychology 418 to register for upper-division psychology courses. Students may not enroll in Psychology 418 more than twice.

Psychology 357 and 359 are offered on the pass/fail basis only; they may not be counted toward the 28 hours in psychology required for the major.

# **Religious Studies**

## Major

Thirty semester hours of religious studies coursework, of which at least 18 hours must be upper-division. A single course may not be counted toward more than one of the following requirements. The 30 hours of coursework must include

- 1. In each of the following areas, at least three semester hours chosen from a list of courses available from the religious studies adviser.
  - a. Area I: Religions of Asia
  - b. Area II: Religions of Europe, the Middle East, and Africa
  - c. Area III: Religions of the Americas
  - d. Area IV: Approaches to the study of religion and comparative studies of religion

- 2. *Primary area:* Six additional hours of upper-division coursework in one of these four areas chosen in consultation with the religious studies adviser
- 3. Religious Studies 375S, Advanced Seminars in Religious Studies

# **Rhetoric and Writing**

#### Major

Twenty-seven semester hours of coursework in rhetoric and writing, at least 18 of which must be upper-division, consisting of

- 1. Rhetoric and Writing 306, Rhetoric and Writing
- 2. Rhetoric and Writing 321, Principles of Rhetoric
- 3. Each of the following courses (any topic):
  - a. Rhetoric and Writing 330C, Advanced Studies in Digital Rhetoric
  - b. Rhetoric and Writing 330D, History of Rhetoric
  - c. Rhetoric and Writing 330E, Rhetorical Theory and Analysis
- 4. Three hours chosen from Rhetoric and Writing 310, 325M, 328 (any topic), 368C, or 368E
- 5. Nine additional semester hours in rhetoric and writing, including six hours of upper-division coursework

# Russian, East European, and Eurasian Studies

#### Major

Students select one of two tracks. Both tracks are designed to allow students considerable opportunity to shape their coursework around their interests:

- 1. Russian, East European, and Eurasian area studies, consisting of: a. Russian, East European, and Eurasian Studies 301
  - b. Russian, East European, and Eurasian Studies 301L
  - c. Six hours of upper-division coursework in a Slavic, Central Asian, or East European language
  - d. Fifteen semester hours of upper-division coursework, which must include one Russian, East European, and Eurasian Studies 325, and either a Russian, East European, and Eurasian Studies 335 or a Russian, East European, and Eurasian Studies 345.

Students pursuing track 1 area studies, must complete a total of three years of language study in a Slavic, Central Asian, or East European language

- 2. Russian, East European, and Eurasian area studies with a language concentration, consisting of:
  - a. Russian, East European, and Eurasian Studies 301
  - b. Russian, East European, and Eurasian Studies 301L
  - c. Twelve hours of upper-division coursework in a Slavic, Central Asian, or East European language
  - d. Nine semester hours of upper-division coursework in Russian, East European, and Eurasian Studies, which must include one Russian, East European, and Eurasian Studies 325, and either a Russian, East European, and Eurasian Studies 335 or a Russian, East European, and Eurasian Studies 345.

Students pursuing track 2 area studies with a language concentration, are encouraged to study their chosen language over the summer or to take a fourth year.

# Sociology

## Major

At least 30 semester hours of coursework in sociology, including Sociology 302, 317L (or approved substitution), 317M, and 379M. At least 18 semester hours must be in upper-division courses. Sociology majors must earn grades of at least *C* in Sociology 302, 317L (or approved substitution), and 317M. To enroll in Sociology 317M for a second time, a student must have the consent of a sociology undergraduate adviser. Students may not enroll in Sociology 317M more than twice.

If the student completes an approved substitute course instead of Sociology 317L, that course is counted toward the 30 hours required for the major and is included in the major grade point average.

# **Sustainability Studies**

## Major

Thirty-nine semester credit hours, including 18 upper division, consisting of the following:

- 1. Geography 304E
- 2. Nine hours of sustainability foundations, consisting of:
  - a. Three hours in humanities and social science, chosen from Anthropology 302, Geography 305, 319, Sociology 302, and Urban Studies 301
  - b. Three hours in environment and earth sciences, chosen from Geography 301C, 301K, and Geological Sciences 302C
  - c. Three hours in economics and development, chosen from Economics 301, 304K, and 304L
- 3. Nine hours of sustainability theories and context, consisting of:
  - a. Three hours in research design and methods, chosen from Geography 310C, Geography 460C, Geography 373F, Geography 373K, and Urban Studies 315
  - b. Three hours communication, chosen from Anthropology 307, Communication Studies 306M, 310K, Geography 356, *Reporting on the Environment*, and Geography 356T, *Geography of the Media*
  - c. Three hours in politics and policy, chosen from Geography 306C, 340D, Communication Studies 322E, and 332
- 4. Twelve hours in a thematic concentration, chosen from an approved list:
  - a. Trajectories to sustainability
  - b. Sustainable choices in a diverse world
  - c. Natural resources management
- 5. One course in experiential learning, chosen from Bridging Disciplines 320K, Geography 379L, and Urban Studies 360
- 6. At least one capstone experience course chosen from Bridging Disciplines 320K, Geography 323K, Geography 356T, *Environmental and Cultural Dynamics in Botswana*, Geography 356T, *Climate Change and Vegetation Response in the Kalahari*, Geography 374, 379L, Journalism 346F, Urban Studies 360, and 370

# **Urban Studies**

The Urban Studies degree program is administered by the Department of Geography and the Environment. Students must be admitted to the degree program. They may apply for admission after completing the following requirements: Mathematics 408C or 408K with a grade of at least C+; Statistics and Data Sciences 301, 302, 304, or 306 with a grade of at least C+. Other comparable courses may be used if approved.

## Major

Twenty-four semester hours of coursework, consisting of:

- 1. Urban Studies 301, 315, and 360
- 2. Urban Studies 370 or an approved equivalent course
- 3. Twelve additional hours of upper-division coursework in urban studies

# Women's and Gender Studies

## Major

Thirty semester hours of coursework in women's and gender studies, 18 hours of which must be upper-division. It is recommended that six semester hours be taken in women's and gender studies courses originating from outside the College of Liberal Arts. The 30 required semester hours must include the following:

- 1. Women's and Gender Studies 301, *Introductory Topics in Women's and Gender Studies* or Women's and Gender Studies 305, *Introduction to Women's and Gender Studies*
- 2. Women's and Gender Studies 340, *Cross-Cultural Topics in Women's and Gender Studies*
- 3. Three semester credit hours, chosen from a topic of Women's and Gender Studies 340 different from the one used for 2, above, or Women's and Gender Studies 335
- 4. Women's and Gender Studies 350, *Feminist Theory*, or another feminist theory course chosen from a list of courses approved by the Center for Women's and Gender Studies
- 5. Women's and Gender Studies 356, *Introduction to Feminist Research Methods*, or another research methods course chosen from a list of courses approved by the Center for Women's and Gender Studies
- 6. Women's and Gender Studies 379L, *Internship in Women's and Gender Studies*, or Women's and Gender Studies 360, *Research and Thesis in Women's and Gender Studies*
- 7. Women's and Gender Studies 379S, Senior Seminar
- 8. Nine additional hours women's and gender studies, including six upper-division

# Bachelor of Arts, Plan II

The Plan II Honors Program is designed to provide a broad, liberal, and challenging education for a limited number of students whose high school class standing and admission test scores indicate strong academic potential and motivation. The enrollment in Plan II is limited; admission to the program is separate from and in addition to admission to the University. Application materials and information about deadlines are available online at https://admissions.utexas.edu/apply.

The Plan II Honors Program is not available to transfer applicants. Disappointed transfer applicants interested in the liberal arts are encouraged to seek departmental honors tracks in the College of Liberal Arts. More information about departmental honors programs is available in the Academic Policies and Procedures (p. 363) section. The Plan II Honors Program includes the basic coursework required of Plan I students, but much of this work is done in small sections that are restricted to Plan II students and taught by professors selected for their excellent teaching records. Additional required courses explore the humanities, the natural sciences, and the social sciences and provide considerable opportunity for individual research, writing, and speaking. The remainder of the student's program is made up of approved electives.

The academic programs of most Plan II students include 36 semester hours or more of elective coursework. The student may use electives to pursue a second major in the College of Liberal Arts or the College of Natural Sciences. Dual degree programs are available in conjunction with most other undergraduate colleges.

Qualified students who are accepted into both the Plan II Honors Program and the Cockrell School of Engineering may pursue a curriculum leading to both the Bachelor of Arts, Plan II, and a bachelor's degree in engineering. Students interested in this dual degree program must apply both to Plan II and to the Cockrell School. Further information is available from the director of Plan II and from the Office of Student Affairs in the Cockrell School.

Qualified students who are accepted into both the Plan II Honors Program and the McCombs School of Business may pursue a curriculum leading to both the Bachelor of Arts, Plan II, and the Bachelor of Business Administration. Students interested in this dual degree program must apply both to Plan II and to the McCombs School of Business. Further information is available from the director of Plan II and from the McCombs School.

A dual degree program is also available that leads to the degrees of Bachelor of Arts, Plan II, and Bachelor of Architecture. Students must apply both to Plan II and to the School of Architecture. Additional information is available from the director of Plan II and from the School of Architecture.

In addition to the following requirements, the student must fulfill the University's General Requirements (p. 20) and the requirements of the College of Liberal Arts given in Special Requirements of the College (p. 370).

## **Special Requirements**

Students who fail to maintain a University grade point average of at least 3.25 will be considered for academic dismissal from Plan II. All students whose grade point average falls below 3.25 but not below 2.50 will be put on academic review. Students whose grade point average falls below 2.50 at any point after their first semester in Plan II will be dismissed from the program. In addition, any student who fails to earn a final grade of at least a C- in any of the following required courses will be dismissed from the program: English 303C, 303D, Philosophy 610QA, 610QB, Social Science 301, Tutorial Course 302, 303C, 303D, 358, 359T, 660HA, 660HB. Students may only register for Tutorial Course 660H or 359T if their University grade point average is 3.25 or higher. All of these stipulations may be appealed and exceptions may be made on a caseby-case basis by the director of Plan II in consultation with the associate director, assistant director, and academic advisers. A student who is academically dismissed from the Plan II program is eligible to continue to enroll in the College of Liberal Arts in another academic program if the student fulfills the academic requirements for the Bachelor of Arts, Plan I, and the scholastic standards for continuance in the University given in the General Information Catalog (http://catalog.utexas.edu/ general-information). Students in scholastic difficulty should discuss their problems with a Plan II academic adviser and the director.

## **Choice of Work**

A degree program must include at least 120 semester hours, including at least 36 hours of upper-division coursework. Without special permission from the director and the dean, no more than 39 hours in one field of study in the College of Liberal Arts or the College of Natural Sciences and no more than 36 hours in courses offered in any other college or school may be counted toward the degree.

Plan II students may use credit by examination to fulfill certain program requirements. More information on testing policies and credit by examination is available from a Plan II academic adviser.

Tutorial Course 302 and two semesters of Tutorial Course 358 are required. Tutorial Course 660H is required of students seeking special honors in Plan II, students pursuing the Plan II degree alone, and students writing creative theses. In exceptional situations, students completing dual degree programs may be approved by the Plan II associate director to enroll in Tutorial Course 359T, *Essay Course*, in lieu of Tutorial Course 660H. Other requirements for the Bachelor of Arts, Plan II, are outlined below. All courses offered in the Plan II Honors Program are subject to approval by the Plan II Faculty Advisory Committee; in some areas the committee will prescribe certain courses for all students in the program. Current information on these matters is available in the Plan II office.

All students must complete the University's Core Curriculum. In the process of fulfilling the core curriculum and other degree requirements, all students are expected to complete the Skills and Experience flags:

- 1. Writing: three flagged courses beyond Rhetoric and Writing 306 or its equivalent
- 2. Quantitative Reasoning: one flagged course
- 3. Global Cultures: one flagged course
- 4. Cultural Diversity in the United States: one flagged course
- 5. Ethics: one flagged course
- 6. Independent Inquiry: one flagged course

Courses that may be used to fulfill core curriculum and flag requirements are identified in the *Course Schedule* (https://registrar.utexas.edu/ schedules). They may be used simultaneously to fulfill other requirements, unless otherwise specified. Please note, students may not earn the cultural diversity and global cultures flags from the same course. Students are encouraged to discuss options with a departmental academic adviser.

The following are the specific requirements of the Plan II program. In some cases, a course that is required for the BA, Plan II, may also be counted toward the core curriculum; these courses are identified below.

- 1. English 303C and 303D, or Tutorial Course 303C and 303D. Each set of courses also meet the English composition and humanities requirements of the core curriculum.
- 2. Two courses beyond Rhetoric and Writing 306 or the equivalent that carry a writing flag. One of these courses must be upperdivision. Courses that carry a writing flag are identified in the *Course Schedule* (http://registrar.utexas.edu/schedules). They may be used simultaneously to fulfill other requirements, unless otherwise specified.
- 3. Proficiency in a language other than English is required. The study of a second language contributes in an important way to a broad education for today's students, who live in a world where the overwhelming majority of people do not speak or read English and where much of the knowledge that is disseminated may never

appear in English. Knowledge of a second language is important for an appreciation of the culture of the people using that language, and it also helps students to understand the structure and complexities of their own native language. Students with sufficient preparation may be able to use the second language for study in their chosen discipline. An intermediate level of competency as determined by the completion of any one of the following options:

a. Certified proficiency on a placement or credit-by-exam test.

b. Students with previous experience in the language they plan to use to meet the language requirement must take a language placement test. A student may not select for credit a language course below this placement level without departmental permission.

c. A passing grade in a language course listed below:

Requirements		Hours
American Sign Langua	ge	
ASL 311D	American Sign Language III: Intermediate	3
Arabic		
ARA 611C	Intensive Arabic II	6
Bengali		
BEN 312L	Second-Year Bengali II	3
Chinese		
CHI 612	Accelerated Second-Year Chinese	4-6
or CHI 412L	Second-Year Chinese II	
Czech		
CZ 611C	Intensive Czech II	4-6
or CZ 412L	Second-Year Czech II	
Danish		
DAN 612	Accelerated Second-Year Danish	6
Dutch		
DCH 612	Accelerated Second-Year Dutch	6
French		
FR 611C	Intermediate French	6
German		
GER 612	Accelerated Second-Year German: Readings in Modern German	6
Greek		
GK 312K	Intermediate Greek II	3-4
or GK 412	Intensive Greek	
GK 312L	Intermediate Greek II: Biblical Greek	3
GK 610C	Intermediate Modern Greek	3-6
or GK 310K	Second-Year Modern Greek II	
Hebrew		
HEB 612C	Intensive Biblical Hebrew II	6
HEB 611C	Intensive Hebrew II	6
Hindi		
HIN 312L	Second-Year Hindi II	3
Italian		
ITL 611C	Intermediate Italian	6
Japanese		
JPN 611D	Intermediate Japanese	6
Korean		
KOR 412L	Second-Year Korean II	4
Latin		

LAT 312K	Intermediate Latin II	3
Malayalam		
MAL 312L	Second-Year Malayalam II	3
Norwegian		
NOR 612	Accelerated Second-Year Norwegian	6
Pashto		
PSH 312L	Second-Year Pashto II	3
Persian		
PRS 611C	Intensive Persian II	6
or PRS 612C	Intensive Persian for Heritage Speakers	
Polish		
POL 312L	Second-Year Polish II	3
Portuguese		
POR 611D	Second-Year Portuguese	6
Russian		
RUS 611C	Intensive Russian II	4-6
or RUS 412L	Second-Year Russian II	
Sanskrit		
SAN 312L	Second-Year Sanskrit II	3
Serbian/Croatian		
S C 312L	Second-Year Bosnian/Croatian/	3
000122	Serbian II	0
Slavic & Eurasian Lang	uages	
SEL 611C	Intensive Slavic and Eurasian	3-6
	Languages II	
or SEL 312L	Languages II Second-Year Slavic and Eurasian Langua II	iges
	Second-Year Slavic and Eurasian Langua	iges
or SEL 312L Spanish SPN 611D	Second-Year Slavic and Eurasian Langua	iges 6
Spanish	Second-Year Slavic and Eurasian Langua	
Spanish SPN 611D	Second-Year Slavic and Eurasian Langua II Second-Year Spanish Accelerated Intermediate Spanish for	
Spanish SPN 611D or SPN 612	Second-Year Slavic and Eurasian Langua II Second-Year Spanish Accelerated Intermediate Spanish for	
Spanish SPN 611D or SPN 612 Swahili	Second-Year Slavic and Eurasian Langua II Second-Year Spanish Accelerated Intermediate Spanish for Heritage Learners	6
Spanish SPN 611D or SPN 612 Swahili SWA 611C	Second-Year Slavic and Eurasian Langua II Second-Year Spanish Accelerated Intermediate Spanish for Heritage Learners	6
Spanish SPN 611D or SPN 612 Swahili SWA 611C Swedish	Second-Year Slavic and Eurasian Langua II Second-Year Spanish Accelerated Intermediate Spanish for Heritage Learners Intensive Swahili II Accelerated Second-Year	6
Spanish SPN 611D or SPN 612 Swahili SWA 611C Swedish SWE 612	Second-Year Slavic and Eurasian Langua II Second-Year Spanish Accelerated Intermediate Spanish for Heritage Learners Intensive Swahili II Accelerated Second-Year	6
Spanish SPN 611D or SPN 612 Swahili SWA 611C Swedish SWE 612 Tamil	Second-Year Slavic and Eurasian Langua II Second-Year Spanish Accelerated Intermediate Spanish for Heritage Learners Intensive Swahili II Accelerated Second-Year Swedish	6 6 6
Spanish SPN 611D or SPN 612 Swahili SWA 611C Swedish SWE 612 Tamil TAM 312L	Second-Year Slavic and Eurasian Langua II Second-Year Spanish Accelerated Intermediate Spanish for Heritage Learners Intensive Swahili II Accelerated Second-Year Swedish	6 6 6
Spanish SPN 611D or SPN 612 Swahili SWA 611C Swedish SWE 612 Tamil TAM 312L Telugu	Second-Year Slavic and Eurasian Langua II Second-Year Spanish Accelerated Intermediate Spanish for Heritage Learners Intensive Swahili II Accelerated Second-Year Swedish Second-Year Tamil II	6 6 3
Spanish SPN 611D or SPN 612 Swahili SWA 611C Swedish SWE 612 Tamil TAM 312L Telugu TEL 312L	Second-Year Slavic and Eurasian Langua II Second-Year Spanish Accelerated Intermediate Spanish for Heritage Learners Intensive Swahili II Accelerated Second-Year Swedish Second-Year Tamil II	6 6 3
Spanish SPN 611D or SPN 612 Swahili SWA 611C Swedish SWE 612 Tamil TAM 312L Telugu TEL 312L Turkish	Second-Year Slavic and Eurasian Langua II Second-Year Spanish Accelerated Intermediate Spanish for Heritage Learners Intensive Swahili II Accelerated Second-Year Swedish Second-Year Tamil II Second-Year Telugu II	6 6 3 3
Spanish SPN 611D or SPN 612 Swahili SWA 611C Swedish SWE 612 Tamil TAM 312L Telugu TEL 312L Turkish TUR 611C	Second-Year Slavic and Eurasian Langua II Second-Year Spanish Accelerated Intermediate Spanish for Heritage Learners Intensive Swahili II Accelerated Second-Year Swedish Second-Year Tamil II Second-Year Telugu II	6 6 3 3
Spanish SPN 611D or SPN 612 Swahili SWA 611C Swedish SWE 612 Tamil TAM 312L Telugu TEL 312L Turkish TUR 611C Urdu	Second-Year Slavic and Eurasian Langua II Second-Year Spanish Accelerated Intermediate Spanish for Heritage Learners Intensive Swahili II Accelerated Second-Year Swedish Second-Year Tamil II Second-Year Telugu II Intensive Turkish II	6 6 3 3 3 6
Spanish SPN 611D or SPN 612 Swahili SWA 611C Swedish SWE 612 Tamil TAM 312L Telugu TEL 312L Turkish TUR 611C Urdu URD 312L	Second-Year Slavic and Eurasian Langua II Second-Year Spanish Accelerated Intermediate Spanish for Heritage Learners Intensive Swahili II Accelerated Second-Year Swedish Second-Year Tamil II Second-Year Telugu II Intensive Turkish II	6 6 3 3 3 6
Spanish SPN 611D or SPN 612 Swahili SWA 611C Swedish SWE 612 Tamil TAM 312L Telugu TEL 312L Turkish TUR 611C Urdu URD 312L Yiddish	Second-Year Slavic and Eurasian Langua II Second-Year Spanish Accelerated Intermediate Spanish for Heritage Learners Intensive Swahili II Accelerated Second-Year Swedish Second-Year Tamil II Second-Year Telugu II Intensive Turkish II Second-Year Urdu II	6 6 3 3 3 6 3

d. Students who wish to meet the requirement with proficiency in a language not listed in the table above should contact the Texas Language Center (http://www.utexas.edu/cola/centers/tlc).

4. Social Science 301. This course also meets the social and behavioral sciences requirement of the core curriculum.

- 5. Six semester hours of non-United States history in the same geographic area.
- 6. Eighteen semester hours of coursework as outlined below. To satisfy the core curriculum and the mathematics and natural science requirement of the BA, Plan II, a student may count (1) no more than 12 hours in mathematics, computer science, and statistics and scientific computation combined; and (2) no more than nine hours in any single field of study. Substitutions do exist for some of the requirements outlined below; each Plan II student should meet with a Plan II academic adviser to discuss her/his individual academic plan.
  - a. Mathematics 310P. This course also meets the mathematics requirement of the core curriculum. Algebra courses at the level of Mathematics 301 or the equivalent may not be counted toward this requirement. Students who enter the University with fewer than three units of high school mathematics at the level of Algebra I or higher must take Mathematics 301 or 303D without degree credit to remove their deficiency.
  - b. A three-hour course in logic or modes of reasoning designated for Plan II students, currently Tutorial Course 310 or a section of Philosophy 313Q.
  - c. Six hours of coursework in astronomy, biology, chemistry, geological sciences, physical science, or physics. This coursework may be used to fulfill the science and technology, part I, requirement of the core curriculum.
  - d. Biology 301E and Physics 321. Either of these courses may also be used to fulfill the science and technology, part II, requirement of the core curriculum. A three-hour course in astronomy, chemistry, or geological sciences designated for Plan II students may be taken in place of Physics 321.
  - e. Any remaining courses needed to provide 18 hours of work must be chosen from the following fields. No more than three hours may be in the history of science or the philosophy of science. A list of approved alternative courses (items 10 and 11) is available in the Student Division and on the College of Liberal Arts website (http://www.utexas.edu/cola/student-affairs/Majors-and-Degrees/Course-Lists.php)
    - i. Astronomy
    - ii. Biology
    - iii. Chemistry
    - iv. Geological sciences
    - v. Marine science
    - vi. Nutrition
    - vii. Physical science
    - viii. Physics
    - ix. Mathematics, computer science, and statistics and data sciences
    - x. Other alternative science courses approved by the dean
    - xi. Approved alternative courses in history of science and philosophy of science
- 7. Philosophy 610Q.
- 8. An approved three-hour course in art history, music history, or history of theatre and dance; or a three-hour upper-division course in classical civilization, humanities, literature, or philosophy.

#### **Electives**

In addition to the core curriculum and the preceding specific requirements, the student must complete enough elective coursework to provide the 120 semester hours required for the degree. These 120

hours may include no more than 12 hours of conference courses and internship courses combined as described in Conference Courses and Internship Courses (p. 370); 12 hours of Bible; nine hours of designated coursework in air force science, military science, or naval science; 19 hours completed on the pass/fail basis; 36 hours in any one field of study in the College of Liberal Arts or the College of Natural Sciences; and 36 hours in any other single college or school of the University. Mathematics courses at the level of college algebra may not count toward elective hours.

## **Order of Work**

The usual order of work for students in Plan II is outlined below, although it is possible to make exceptions when there is good reason for doing so. There is some variation in the order of work for students in premedical, predental, and dual degree programs, for teacher certification candidates, and for students concentrating in science. Students in these areas should consult the director or an academic adviser.

#### **Suggested Four-Year Plan**

#### First Year:

- Tutorial Course 303C and 303D, or English 303C and 303D
- Biology 301E, Mathematics 310P, and Philosophy 313Q or Tutorial Course 310
- · Six semester hours of non-United States history
- Foreign language courses
- Tutorial Course 302
- · A three-semester-hour elective

#### Second Year:

- Philosophy 610Q
- · Three semester hours in mathematics or natural science
- Government 310L and 312L
- Foreign language courses
- Social Science 301
- · A three-semester-hour elective

#### Third and Fourth Years:

- · Three semester hours in the visual and performing arts
- Three semester hours of humanities or courses in the history of fine arts
- · Six semester hours of American history
- Six semester hours of Tutorial Course 358
- Tutorial Course 359T or 660H
- · Physics 321 and three additional hours of science
- Elective courses sufficient to make a total of at least 120 semester hours, with only upper-division courses usually being approved for third- and fourth-year students

## Bachelor of Science in Environmental Science

The Bachelor of Science in Environmental Science is designed for students interested in an interdisciplinary scientific perspective on environmental and sustainability issues, analysis, and management. The degree program provides the broad foundation in physical, life, and social sciences needed for a career or graduate study in environmental science and related fields such as climate change, ecology, and conservation. Students who complete the program successfully will be able to assess environmental issues critically from multiple perspectives; to perform field, laboratory, and computer analyses; and to conduct original research. The program is designed to prepare graduates for careers in local, state, and federal government laboratories and nonprofit agencies, environmental consulting firms, environmental education and outreach agencies, and universities and other research settings. The degree is offered by the Jackson School of Geosciences with a major in geological sciences, by the College of Liberal Arts with a major in geographical sciences, and by the College of Natural Sciences with a major in biological sciences. The degree programs share common prescribed work, but each major has its own specific requirements. Students may earn only one Bachelor of Science in Environmental Science degree from the University.

The Bachelor of Science in Environmental Science curriculum consists of 126 semester hours of coursework. All students must complete the University's Core Curriculum (p. 23). The specific degree requirements consist of prescribed work, major requirements, and electives. In some cases, a course that is required for the degree may also be counted toward the core curriculum.

A course in one prescribed work area may not also be used to fulfill the requirements of another prescribed work area; the only exception to this rule is that a course that fulfills one requirement may also be used to fulfill a flag requirement, unless otherwise specified.

In the process of fulfilling the core curriculum and other degree requirements, all students are expected to complete courses with content in the following Skills and Experience flags:

- 1. Writing: three flagged courses beyond Rhetoric and Writing 306 or its equivalent
- 2. Quantitative reasoning: one flagged course
- 3. Global cultures: one flagged course
- 4. Cultural diversity in the United States: one flagged course
- 5. Ethics: one flagged course
- 6. Independent inquiry: one flagged course

#### Prescribed Work Common to All Environmental Science Majors

- 1. Mathematics: Mathematics 408C, or 408N and 408S, or 408K and 408L
- 2. Chemistry: Chemistry 301 or 301H; 302 or 302H; and 204
- 3. Physics: 317K and 117M, or another four-hour calculus-based physics sequence
- 4. Biological sciences: Biology 311C and 311D, or 315H
- 5. Ecology:
  - a. Biology 373 or Marine Science 320. Marine Science 320 may not be used to satisfy both requirement 5a and requirement 10c
  - Biology 373L or Marine Science 120L. Environmental science majors in the College of Natural Sciences must choose Biology 373L
- 6. Geological sciences: Geological Sciences 401 or 303, 346C, and an approved geological sciences course in sustainability
- 7. Geography: Geography 335N
- Field experience and research methods: Environmental Science 311 and 121
- Senior field/research experience: one of the following pairs:
   a. Environmental Science 271 and 371 or Environmental Science 171 and 471

- b. Environmental Science 172C and 472D or Environmental Science 272C and 372D
- c. Environmental Science 271 or Marine Science 348, and one of the following: Chemistry 320M, Geography 460G, 368C, 462K, Geological Sciences 327G, Mathematics 408D or 408M. Note: Geography 460G, 462K, and Geological Sciences 327G may not be used to satisfy both requirement 9c and 10b. Biology 277 may substitute for Environmental Science 271 with prior approval of the faculty adviser.
- 10. Environmental and sustainability themes: One course in each of the following thematic areas:
  - a. Environmental and sustainability policy, ethics, and history: Geography 334, 336C, 340D, 342C, 356C, Journalism 346F, Marine Science 367K, and Philosophy 325C. Biology 337, Geography 356, 356T, or Sociology 321K may be counted with prior approval of the faculty adviser.
  - B. Geographic information systems: Geography 460G, 462K, Geological Sciences 327G
  - c. Climates and oceans: Biology 456L, Geography 333K, Geological Sciences 347D, 347G, 377P, Marine Science 320, 440, 352, 354Q, 354T, 356. Marine Science 320 may not be used to satisfy both requirement 5 and requirement 10, Marine Science 356 may not be used to satisfy both requirement 10c and requirement 14 in Option I.Marine Science 356 may not be used to satisfy both requirement 10c and requirement 18 in Option II. Geography 356T, Geological Sciences 371C, and Marine Science 352 may count with prior approval of the faculty adviser.
  - d. Environmental economics, sustainability, and business: Economics 304K, 330T. Advanced Placement credit for Economics 304L may be used to satisfy this requirement.
- 11. Environmental Science 141 and 151

# Admission to the Environmental Science Program

All freshmen and external transfer students majoring in environmental science (EVS) are first admitted to the University as entry-level EVS majors in the Jackson School of Geosciences, the College of Liberal Arts, or the College of Natural Sciences. After completing a minimum of 24 hours in residence, students may select the EVS degree plan that best suits their long-term interests and, if necessary, transfer to the appropriate college/school in accordance with the regulations and procedures set forth in that college or school's *General Information*.

#### **Freshman Admission**

Freshmen applicants seeking admission to the EVS major through the Jackson School of Geosciences, the College of Liberal Arts, or the College of Natural Sciences must meet the calculus readiness requirement by the official admissions application deadline. More information about the calculus readiness requirement is available through the University Admissions Office (https:// admissions.utexas.edu/apply/calculus-readiness).

Freshmen applicants to the EVS major from all three colleges/schools are reviewed and admitted as a single cohort. Applicants should use the ApplyTexas online application (https://www.applytexas.org/adappc/ gen/c\_start.WBX) and select the "Environmental Science, Entry-Level" major option listed in the Jackson School of Geosciences, the College of Liberal Arts, or the College of Natural Sciences as a first-choice major. Applicants should apply to the EVS program in the college that best suits their anticipated area of focus (geographical sciences, biological sciences, or geological sciences, respectively).

## **External Transfer Admission**

Students who wish to transfer to the University from another college or University must apply to the Office of Admissions as described in General Information (http://catalog.utexas.edu/general-information/ admission/undergraduate-admission/#transferadmissiontext). External transfer applicants seeking admission to the Environmental Science (EVS) Degree Program through the Jackson School of Geosciences, the College of Liberal Arts, or the College of Natural Sciences must demonstrate calculus readiness by the official admissions application deadline. Details regarding transfer calculus readiness are available through the University Admissions Office (https:// admissions.utexas.edu/apply/calculus-readiness).

External transfer applicants to the EVS major from all three colleges/ schools are reviewed and admitted as a single cohort. Applicants should use the ApplyTexas online application (https://www.applytexas.org/ adappc/gen/c\_start.WBX) and select the "Environmental Science, Entry-Level" major option listed in the Jackson School of Geosciences, the College of Liberal Arts, or the College of Natural Sciences as a firstchoice major. Applicants should apply to the EVS program in the college that best suits their anticipated area of focus (geographical sciences, biological sciences, or geological sciences, respectively).

#### **Internal Transfer Admission**

Internal transfer, entry-level applications submitted to the EVS major through the Jackson School of Geosciences, the College of Liberal Arts, and the College of Natural Sciences are reviewed and admitted as a single cohort. All internal transfer applicants should use the online EVS Program Transfer Application and must meet the requirements for internal transfer given in the General Information (http://catalog.utexas.edu/general-information/registration-tuition-and-fees/transfer-from-one-division-to-another-within-the-university).

To be competitive for admission, internal transfer applicants should have a grade point average of at least 3.0 in Biology 311C, Chemistry 301, Mathematics 408C or 408N or 408K, and Geological Sciences 401 or 303.

Additional Information for all internal transfer applicants:

- Application Deadline: March 1st for entry the following academic year.
- Only currently enrolled students in good academic standing with their college of residence may apply.
- Students may apply during the semester they are completing the minimum requirements to be eligible for consideration.
- Entry-level admission to all Environmental Science majors is offered as space is available to the students who are best qualified. Decisions are based on the student's grade point average in the introductory science and math courses listed above, University grade point average, and other factors including, but not limited to, difficulty of course load, course repetitions, proven mathematical ability, and interest in the field of Environmental Science.

Students should consult with an Academic Advisor for additional information on the application process and deadlines.

## Additional Prescribed Work

 Writing and Literature: English 316L, 316M, 316N, or 316P, and two courses beyond Rhetoric and Writing 306 or the equivalent that carry a writing flag. One of these courses must be upper-division. Courses that carry a writing flag are identified in the *Course Schedule* (http:// registrar.utexas.edu/schedules). They may be used simultaneously to fulfill other requirements, unless otherwise specified.

- 2. Foreign language/culture: One of the following foreign language/ culture choices:
  - a. Second-semester-level proficiency, or the equivalent, in a foreign language.
  - b. First-semester-level proficiency, or the equivalent, in a foreign language and a three-semester-hour course in the culture of the same language area.
  - c. Two three-semester-hour courses in one foreign culture area chosen from a list of approved courses available in the Student Division or from the undergraduate adviser.

Courses taken to attain a certain level of proficiency in a foreign language are not electives and cannot be taken on the pass/fail basis.

3. *Social science:* Three semester hours chosen from a list of approved courses, in addition to the course used to fulfill the social and behavioral sciences requirement of the core curriculum. Courses on the approved list are primarily in anthropology, economics, geography, linguistics, psychology, and sociology, but not every course in these fields is approved.

The list is available each semester in the Student Division and on the College of Liberal Arts website (http://www.utexas.edu/cola/ student-affairs/Majors-and-Degrees/Course-Lists.php).

4. *Cultural expression, human experience, and thought:* Three semester hours of approved coursework. The course must be in a field of study taught in the College of Liberal Arts. A course counted toward any requirement of the core curriculum may not also be counted toward this requirement.

A list of approved courses is available each semester in the Student Division and on the College of Liberal Arts website (https:// liberalarts.utexas.edu/student-affairs/Majors-and-Degrees/Course-Lists.php).

## **Major Requirements**

The following 30 semester hours of coursework are required; these hours must include at least 18 hours of upper-division coursework.

- 1. Geography 301C and 304E
- Twenty-four additional hours of coursework in geography, selected from Geography 301K, 333C, 333K, 334K, 334L, 335C, 335K, 335N, 338C, 339, 346, 356T (approved topics), 357, 460G, 462K, 464K, 366C, 366K, 367K, 470C, and 476T (approved topics)
- 3. A grade point average of at least 2.00 in the 30 hours of geography coursework required for the major

#### **Electives**

In addition to the core curriculum, prescribed work, additional prescribed work, and major requirements, the student must complete enough elective coursework to provide the 126 semester hours required for the degree. These 126 hours may include no more than 12 hours of conference courses and internship courses combined as described in Conference Courses and Internship Courses (p. 370); 12 hours of Bible courses; nine hours of designated coursework in air force science, military science, or naval science; 16 hours completed on the pass/fail basis; 39 hours in any one field of study offered in the College of Liberal Arts or the College of Natural Sciences, unless major requirements state otherwise; and 36 hours in courses offered in any other single college or school of the University. Mathematics courses at the level of college algebra may not count toward elective hours.

## Bachelor of Science in Psychology

As an alternative to the Bachelor of Arts degree, the Bachelor of Science in Psychology is designed to offer students a more extensive scientific program that may better prepare them for graduate study or employment in research fields. Students interested in mathematicsbased or physiology-based areas of psychology have the opportunity to develop more breadth and depth in the fields that complement their area of interest within psychology. To accomplish this goal, the curriculum for the Bachelor of Science in Psychology puts more emphasis on natural sciences and less on language arts.

A student may not earn both the Bachelor of Arts with a major in psychology and the Bachelor of Science in Psychology.

A total of 120 semester hours is required. Thirty-six hours must be in upper-division courses. At least 60 hours, including 18 hours of upper-division coursework, must be completed in residence at the University. Provided these residence rules are met, credit may be earned by examination, by extension, by correspondence (up to 30 percent of the hours required for the degree), or, with the approval of the dean, by work transferred from another institution. Up to 16 semester hours of classroom and/or correspondence coursework may be taken on the pass/fail basis; this coursework may be counted only as electives.

Students in this degree program may pursue any of the honors programs available to Bachelor of Arts, Plan I, students. These programs are described in the section Liberal Arts Honors Programs, Plan I (p. 363).

All students must complete the University's Core Curriculum (http:// catalog.utexas.edu/general-information/academic-policies-andprocedures/core-curriculum). In the process of fulfilling the core curriculum and other degree requirements, all students are expected to complete the Skills and Experience flags:

- 1. Writing: three flagged courses beyond Rhetoric and Writing 306 or its equivalent
- 2. Quantitative Reasoning: one flagged course
- 3. Global Cultures: one flagged course
- 4. Cultural Diversity in the United States: one flagged course
- 5. Ethics: one flagged course
- 6. Independent Inquiry: one flagged course

Courses that may be used to fulfill core curriculum and flag requirements are identified in the Course Schedule (http://registrar.utexas.edu/ schedules). They may be used simultaneously to fulfill other requirements, unless otherwise specified. Please note, students may not earn the cultural diversity and global cultures flags from the same course. Students are encouraged to discuss options with a departmental academic adviser.

The specific requirements for the Bachelor of Science in Psychology consist of prescribed work, the major, the minor, and electives. Only in the following cases may a single course be counted toward more than one requirement:

- A course that fulfills a core curriculum requirement may also be counted toward any specific requirement of the BSPsy unless otherwise stated below.
- 2. Courses counted toward the prescribed work may also be counted toward the major.
- 3. Up to three hours of coursework counted toward the prescribed work or toward the core curriculum may also be counted toward the minor.

4. A course that fulfills another requirement may also be used to fulfill a flag requirement.

The student must fulfill the University's General Requirements (p. 20) for graduation and the requirements given in the sections Special Requirements of the College of Liberal Arts (p. 370) and Applicability of Certain Courses (p. 370). University graduation requirements include a grade point average of at least 2.00 in all courses taken at the University (including credit by examination, correspondence, and extension) for which a grade or symbol other than *Q*, *W*, *X*, or *CR* is recorded; for this degree, the student must also earn a grade point average of at least 2.00 in courses taken at the University and counted toward the major requirement.

More information about grades and the grade point average is given in the *General Information Catalog* (http://catalog.utexas.edu/generalinformation/academic-policies-and-procedures/computation-of-thegrade-point-average).

## **Prescribed Work**

- 1. Writing and Literature: English 316L, 316M, 316N, or 316P, and two courses beyond Rhetoric and Writing 306 or the equivalent that carry a writing flag. One of these courses must be upper-division. Courses that carry a writing flag are identified in the *Course Schedule* (http:// registrar.utexas.edu/schedules). They may be used simultaneously to fulfill other requirements, unless otherwise specified.
- 2. *Foreign language/culture:* Students must complete one of the following options:
  - a. Second-semester-level proficiency, or the equivalent, in a foreign language.
  - b. First-semester-level proficiency, or the equivalent, in a foreign language and a three-semester-hour course in the culture of the same language area.
  - c. Two three-hour foreign culture courses chosen from a list available in the college's Student Division and the Department of Psychology.

Courses taken to attain the required level of proficiency in a foreign language are not electives and may not be taken on the pass/fail basis.

3. *Social science:* Three semester hours chosen from a list of approved courses, in addition to the course used to fulfill the social and behavioral sciences requirement of the core curriculum. Courses on the approved list are primarily in anthropology, economics, geography, linguistics, psychology, and sociology, but not every course in these fields is approved. Courses that are approved to count toward any core curriculum area other than social and behavioral sciences may not be counted toward this requirement.

The list is available each semester in the Student Division and on the College of Liberal Arts website. (http://www.utexas.edu/cola/ student-affairs/Majors-and-Degrees/Course-Lists.php)

- 4. *Mathematics and natural science:* At least 25 semester hours of coursework as outlined below. Some of the courses that fulfill this requirement may also be counted toward the requirements of the core curriculum. No course may be counted toward both requirement 4c and 4d.
  - a. Mathematics 408C or 408K or a more advanced calculus course
  - b. Statistics and Data Sciences 301, 302, 303, 304, 305, 306, 321, 328M, 332, 352, 378, African and African Diaspora Studies 302M , Educational Psychology 371 or a more advanced Math course in probability
  - c. 16 to 18 hours, consisting of two of the following sequences:

- i. Biology 311C, 311D, and 325
- ii. Chemistry 301, 302, and 204
- iii. Computer Science 303E, 313E, and one of the following: Computer Science 323E, 324E, 326E, 327E, 329E
- iv. Physics 317K, 117M, 317L, and 117N; or 301, 101L, 316, and 116L; or 303K, 103M, 303L, and 103N; or 302K, 102M, 302L, and 102N
- d. One of the following:
  - i. Three additional hours in mathematics. Mathematics 301, 302, 303D, 303F, 316K, and 316L may not be used to fulfill this requirement.
  - ii. Three hours in biology, chemistry, computer science, or physics. Only the courses listed in requirement 4c above and more advanced courses may be used to fulfill this requirement.
- 5. Cultural expression, human experience, and thought: Three semester hours of approved coursework. The course must be in a field of study taught in the College of Liberal Arts. A course counted toward any requirement of the core curriculum may not also be counted toward this requirement. A course counted toward the foreign language/ culture requirement, above, may not also be counted toward this requirement.

A list of approved courses is available each semester in the Student Division and on the College of Liberal Arts website. (https:// liberalarts.utexas.edu/student-affairs/Majors-and-Degrees/Course-Lists.php)

## **Major Requirements**

Twenty-eight semester hours of psychology, including Psychology 301 and 418, each with a grade of at least *C*, and at least 18 semester hours of upper-division coursework. Of these 28 hours, 18 hours, including Psychology 418 and at least six hours of upper-division coursework, must be completed in residence at the University. Also included in these 28 hours must be at least six hours in each of the following two categories. A list of the courses in each area is available at https:// liberalarts.utexas.edu/psychology/ and in the Department of Psychology Undergraduate Office.

- 1. Clinical/social/developmental/evolutionary psychology
- 2. Cognition/language/neuroscience/perception

Psychology majors must earn a grade of at least *C* in Psychology 418 to register for upper-division psychology courses. Students may not enroll in Psychology 418 more than twice.

Psychology 357 and 359 may not be counted toward the 28 hours in psychology required for the major.

#### Minors

Students must also fulfill the requirements of a minor. The minor consists of a specific number of semester hours of coursework completed outside the student's major field. The requirements of the minor are established by the offering department. Only one minor may be declared per major. Before planning to use a course to fulfill the minor requirement, the student should consult the department that offers the course.

At least nine of the hours required for the minor must include coursework not used to satisfy the requirements of the student's major. Courses used to fulfill the requirements for a minor must be taken on the lettergrade basis, and half of the required semester hours must be taken in residence.

## **Electives**

In addition to the core curriculum, prescribed work, major, and minor, the student must complete enough elective coursework to provide the 120 semester hours required for the degree. These 120 hours may include no more than 12 hours of conference courses and internship courses combined as described in Conference Courses and Internship Courses (p. 370); 12 hours of Bible courses; nine hours of designated coursework in air force science, military science, or naval science; 16 hours completed on the pass/fail basis; 39 hours in any one field of study in the College of Liberal Arts or the College of Natural Sciences (including psychology); and 36 hours in any other single college or school of the University. Mathematics courses at the level of college algebra may not count toward elective hours.

# **Minor and Certificate Programs**

#### Minor

The transcript-recognized undergraduate academic minor must be completed in conjunction with an undergraduate degree at The University of Texas at Austin. For more information regarding the requirements for achieving a minor, including a comprehensive list of minors, please visit the Minors and Certificate Programs (p. 13) section of the Undergraduate Catalog.

Transcript-recognized undergraduate minors in foreign languages require a minimum of 15 hours of coursework in the minor area, but may not require more than 21 hours. None of the specified coursework from the minor can include unnumbered topics courses. Minors must include a minimum of nine hours beyond first year competence in the language, including at least three hours of upper division coursework. At least half of the required course work in the minor must be completed in residence at The University of Texas at Austin.

#### African and African Diaspora Studies Minor

Fifteen semester hours of African and African Diaspora Studies, including:

Requirements		Hours	
AFR 303	Introduction to Black Studies		3
AFR 304	Introduction to the Study of Africa		3
One additional course of Africa, such as AFR 310	n the subject of the continent of K <sup>1</sup>		3
Six hours of upper-divisi tracks: <sup>2</sup>	on courses in one of the following		6
Critical Race, Gender,	and Sexuality Theories		
Performance, Music,	Art, and Literature		
Language, History, an	d Behavioral and Social Sciences		
Law, Education, Healt	h, and Policy		
1. Full list available from	the department		

2. Track lists available from the department

## American Sign Language Minor

#### by admission only

Student must have completed American Sign Language 610D and demonstrate Intermediate-Low to Intermediate-Mid proficiency following ACTFL speaking guidelines before applying to the minor.

Twenty-one semester credit hours, including the following or their equivalents:

Requirements		Hours	
ASL 601D	American Sign Language I:		12
& ASL 610D	Beginning		
	and American Sign Language II: Beginning		
ASL 311D	American Sign Language III: Intermediate		3
Six hours upper-division	American Sign Language		6
Please Note:			

Candidates must apply for the ASL minor, and certification of completion of the requirements for the minor will be made by the ASL program director.

#### **American Studies Minor**

Fifteen semester credit hours, including:

Requirements		Hours
AMS 310	Introduction to American Studies	3
AMS 311S	Introductory Seminar in American Studies	3
AMS 355	Main Currents of American Culture to 1865	3
or AMS 356	Main Currents of American Culture s	ince 1865
AMS 370	Seminar in American Culture	3
Three additional semester	er credit hours of American studies	3
Please Note:		

Must include nine hours of upper-division courses

#### **Anthropology Minor**

Fifteen semester credit hours, including:

Requirements		Hours	
Two of the following cou	Irses:		6
ANT 301	Biological Anthropology		
ANT 302	Cultural Anthropology		
ANT 304	Introduction to Archaeological Studies: Prehistoric Archaeology		
ANT 307	Culture and Communication		
Nine additional hours up	pper-division anthropology		9
Please Note:			

A minimum of nine hours must be completed in residence.

A student must earn a grade point average of at least 2.00 in courses taken at the University and counted toward the minor requirements.

#### Arabic Minor

Eighteen semester credit hours in Arabic, consisting of the following or their equivalents:

#### Requirements

ARA 601C	Intensive Arabic I	6
ARA 611C	Intensive Arabic II	6
Six hours upper-division	on Arabic	6

Hours

## Archaeology Minor

Fifteen semester credit hours, including:

Requirements		Hours	
ANT 304	Introduction to Archaeological Studies: Prehistoric Archaeology		3
or ANT 304T	Introduction to Texas Archaeology		
Three semester credit he	ours from the following courses:		3
ANT 324L	Topics in Anthropology <sup>1</sup>		
ANT 453	Archaeological Analysis		
ANT 353E	Archaeological Laboratory Analysis		
ANT 662	Field Archaeology		
ANT 462M	Archaeological Techniques		
Nine hours of upper-divi approved list available ir	sion courses, chosen from an 1 the department office		9

1. Chosen from one of the three following topics: Topic 3: Primitive Technology, Topic 33: Geographical Information Systems and Remote Sensing for Archaeology and Paleontology, or Topic 58: Digital Data Systems in Archaeology

#### Asian American Studies Minor

Fifteen semester hours, including:

Requirements	Hours	
AAS 301	Introduction to Asian American Studies	3
or AAS 312	Introduction to Asian American History	
Nine hours of upper-divis	ion coursework	9
Three additional semesters studies	er credit hours of Asian American	3

## **Asian Religions Minor**

Fifteen semester hours, including:

Requirements		Hours	
R S 310	Introduction to the Study of Religion		3
ANS 301R	History of the Religions of Asia		3
Nine hours (at least six u approved list	upper-division) chosen from an		9

#### **Chinese Minor**

At least 15 semester credit hours Chinese, including:

Requirements		Hours
First-Year Chinese Requi	rement	6 or 12
CHI 606 & CHI 607	First-Year Chinese I and First-Year Chinese II	
or CHI 604	Accelerated First-Year Chinese	
Second-Year Chinese Requirement		6 or 12
CHI 312K & CHI 312L	Second-Year Chinese I and Second-Year Chinese II	
or CHI 612	Accelerated Second-Year Chinese	
Three hours upper-division	on Chinese	3

#### **Classical Studies Minor**

Seventeen semester credit hours, including:

Requirements		Hours	
GK 506	First-Year Greek I		5
or LAT 506	First-Year Latin I		
Twelve hours from the fo	bllowing: <sup>1</sup>		12
Any Classical Civilizat	tion course or		
AHC 319	Introductory Surveys in Roman and Greek History		
or AHC 325	Topics in Ancient History		
or AHC 378	Undergraduate Seminar in Ancient H	History	

1. At least six of these hours must be upper-division

#### **Comparative Literature Minor**

Fifteen semester credit hours, including:

Requirements		Hours	
C L 301	Introduction to Comparative Literature		3
C L 315	Masterworks of World Literature		3
Six semester credit hours of Comparative Literature 323, Topics in Comparative Literature, in a single regional or linguistic area			6
Three additional semest Literature 323, Topics in	er hours of any Comparative Comparative Literature		3

## **Core Texts and Ideas Minor**

Fifteen semester credit hours, including:

Requirements	Hours	
Fifteen hours of Core Texts and Ideas courses $^{1}$		15
1. Must include at least six hours of upper-division courses and at least nine hours in residence		

## **Cultural Anthropology Minor**

Fifteen semester credit hours, including:

Requirements		Hours	
ANT 302	Cultural Anthropology		3
ANT 305	Expressive Culture		3
Nine upper-division semester credit hours chosen from an approved list			9

## **Economics Minor**

The transcript-recognized minor in economics allows students not majoring in economics to master an important and useful set of concepts, simple models, and analytical skills in economics. Students may focus on analytical skills and quantitative methods by taking theory courses and courses in economic statistics and econometrics; or they may take a cluster of upper-division economics courses in order to explore a field of economics in some depth.

To fulfill the requirements of the transcript-recognized minor in economics, students must complete at least 15 semester hours of coursework as described below. All of the upper-division economics courses must be taken in residence at The University of Texas at Austin. All courses must be taken on a letter-grade basis. Up to three of the upper-division hours may be from an approved list of courses offered by a different department at The University of Texas at Austin. A substitute for Economics 329 may satisfy the prerequisite for Economics 420K but may not count toward upper-division economics hours applied to the minor in economics.

The transcript-recognized minor in economics requirements are:

Requirements	I	lours
ECO 304K	Introduction to Microeconomics	3
ECO 304L	Introduction to Macroeconomics	3
One of the following:		3 or 4
ECO 420K	Microeconomic Theory	
or ECO 421K	Microeconomic Theory For Business	
One upper-division ec of ECO 420K or 421K	onomics course with a pre-requisite	
Two additional upper-div ECO 420K and 421K	ision economics courses, excluding	6 or 7

## **English Minor**

Fifteen semester credit hours in English, including:

Requirements	Hours	
Fifteen semester hours in English <sup>1</sup>		15
Please Note:		
A grade of C- or higher is required in each course counted toward fulfillment of the minor.		

1. Must include at least nine hours of upper-division coursework and nine hours in residence.

## **European Studies Minor**

Fifteen semester credit hours, including:

Requirements	Hours	
EUS 305	Introduction to European Studies	3
EUS 350	Governments and Politics of Western Europe	3
or GOV 351D	The Theoretical Foundations of Modern Politics	
One of the following cou	rses:	3
EUS 346	Topics in European Anthropology, Geography, History, and Sociology	
EUS 347	Topics in European Culture, Literature, Art, Music, and Media	
EUS 348	Topics in European Economics, Government, Business, and Policy	
Six additional hours of upper-division European Studies Courses		6

#### **Evolutionary and Functional Anatomy Minor**

by admission only

Fifteen semester credit hours, including:

Requirements		Hours	
ANT 301	Biological Anthropology		3
Twelve hours from the fo	ollowing courses:		12
ANT 432L	Primate Anatomy		
ANT 348	Human Origins and Evolution		
ANT 348K	Current Topics in Biological Anthropology (Topic 8: Evolutionary Anatomy of the Head and Neck)		

ANT 348K	Current Topics in Biological Anthropology (Topic 11: Early Hominid Evolution)
ANT 349C	Human Variation
ANT 350C	Primate Sensory Ecology
ANT 351E	Primate Evolution
ANT 366	Anatomy and Biology of the Human Skeleton

Please Note:

A minimum of nine hours must be upper-division.

A minimum of nine hours must be completed in residence.

A student must earn a grade point average of at least 2.00 in courses taken at the University and counted toward the minor requirements.

#### **French Studies Minor**

Twenty-one semester credit hours, including:

Either:

Requirements		Hours	
FR 601C	Beginning French		6
FR 611C	Intermediate French		6
FR 317C	Enhancing French Skills		3
FR 320E	Advanced French I		3
Three additional semest French	er credit hours of upper-division		3

Or:

Requirements		Hours	
FR 406 & FR 407	Introductory French I and Introductory French II		8
FR 412K	Intermediate French I		4
FR 317C	Enhancing French Skills		3
FR 320E	Advanced French I		3
Three additional sem French	nester credit hours of upper-division		3

#### **Geography Minor:**

A minimum of 15 hours in Geography, including:

Requirements	Но	urs
GRG 301C/401C	The Natural Environment <sup>1</sup>	3/4
or GRG 301K	Weather and Climate	
GRG 305	This Human World: An Introduction to Geography	3
GRG 310C	Spatial Data and Analysis	3 or 4
or GRG 460G	Environmental Geographic Information Systems	
or GRG 462K	Introduction to Remote Sensing of the Environment	
Six additional semester geography	credit hours of upper-division	6

1. Course is GRG 301C now and becomes GRG 401C beginning Fall 2018.

# German, Scandinavian and Dutch Studies Minor

A minimum of 15 hours German, Scandinavian, and Dutch Studies coursework:

<b>Requirements</b> Fifteen hours of German, Scandinavian, and Dutch Studies <sup>1</sup>	Hours	15
		15
<ol> <li>Must include at least nine hours of upper-division coursework.</li> </ol>		
Government Minor		
Eighteen semester hours, including:		

Requirements	Hours	
Eighteen hours of coursework in government <sup>1</sup>		18

1. Must include at least nine hours of upper-division coursework and at least nine hours in residence.

#### **Greek Minor**

At least 19 semester credit hours in Greek, including:

Requirements		Hours	
GK 506	First-Year Greek I		10
& GK 507	and First-Year Greek II		
GK 311	Intermediate Greek I		3
GK 312K	Intermediate Greek II		3
or GK 312L	Intermediate Greek II: Biblical Greek		
One of the following uppe	er-division courses:		3
GK 324	Advanced Greek		
GK 328	Advanced Biblical Greek		

#### **Hebrew Minor**

At least 15 hours of Hebrew, including:

Requirements		Hours
First-Year Hebrew Requi	rement	6 or 10
HEB 506 & HEB 507	First-Year Hebrew I and First-Year Hebrew II	
or HEB 601C	Intensive Hebrew I	
Second-Year Hebrew Re	quirement	6 or 8
HEB 412K & HEB 412L	Second-Year Hebrew I and Second-Year Hebrew II	
or HEB 611C	Intensive Hebrew II	
Three hours upper-divisi	on Hebrew	3

#### **History Minor**

Fifteen semester credit hours, including:

Requirements	Hours
Fifteen hours of coursework in history <sup>1</sup>	15

1. Must include at least six hours of upper-division.

#### Iberian and Latin American Literatures, Cultures, and Linguistics

Eighteen semester credit hours, consisting of:

Requirements	I	Hours	
SPC 320C	Topics in Iberian or Latin American Studies		3
SPN 327C	Advanced Grammar and Writing in Context		3
or SPN 327N	Academic Writing for Heritage Speak	ers	
SPN 328C	Introduction to Literatures and Cultures		3
or SPN 330L	Introduction to Language and Linguis Society	stics in	
Nine additional semester or above	r credit hours of SPN numbered 328		9

#### **Islamic Studies Minor**

Fifteen semester credit hours, including:

Requirements		Hours	
ISL 310	Introduction to Islam		3
ISL 340	Topics in Islam		3
Nine additional hours of the following:	upper-division Islamic studies from		9
ISL 340	Topics in Islam		
ISL 372	Topics in Islamic Cultures		
ISL 373	Topics in Middle Eastern Islamic Cultures		

#### **Italian Studies Minor**

Eighteen semester credit hours of Italian, including:

Requirements		Hours	
ITL 601C	Beginning Italian		6
ITL 611C	Intermediate Italian		6
ITL 320	Advanced Italian		3
Three additional semester credit hours of upper-division Italian			3
Please Note:			
Six of the credit hours	must be upper-division.		

## Korean Minor

At least 15 semester credit hours Korean, including:

Requirements		Hours
First-Year Korean Require	ement	6 or 12
KOR 606 & KOR 607 or KOR 604	First-Year Korean I and First-Year Korean II Accelerated First-Year Korean	
Second-Year Korean Req	uirement	6
KOR 312K & KOR 312L	Second-Year Korean I and Second-Year Korean II	
or KOR 612	Accelerated Second-Year Korean	
Three hours upper-division	on Korean	3

# Language, Culture, and Communication Minor

Fifteen semester credit hours, including:

Requirements		Hours	
ANT 302	Cultural Anthropology		3
ANT 307	Culture and Communication		3
Nine upper-division cre	dit hours chosen from an approved list		9

#### Latin Minor

Eighteen semester credit hours in Latin, consisting of:

Requirements		Hours
LAT 506 & LAT 507	First-Year Latin I and First-Year Latin II	10
LAT 511K	Accelerated Intermediate Latin	5
LAT 322	Advanced Latin I	3

# Lesbian, Gay, Bisexual, Transgender, and Queer/Sexualities Studies Minor

by admission only

Fifteen semester-credit hours, including:

Requirements		Hours
WGS 303	Introduction to Lesbian, Gay, Bisexual, Transgender, and Queer Studies	3
or WGS 305	Introduction to Women's and Gender	Studies
WGS 335	Topics in Lesbian, Gay, Bisexual, Transgender, and Queer Studies	3
Six semester credit hours	s from the following courses:	6
WGS 335	Topics in Lesbian, Gay, Bisexual, Transgender, and Queer Studies	
An upper-division WG	S course	
Another course approved	l by Research Cluster chair	3

## **Medieval Studies Minor**

Fifteen semester credit hours, including:

Requirements	Hours	
Three hours of coursework in literary approaches to the Middle Ages, chosen from an approved list.		3
Three hours of course work in historical approaches to the Middle Ages, chosen from an approved list.		3
Nine additional hours, chosen from either of the above two lists.		9
Please Note:		

Must include nine hours upper-division and nine hours in residence.

## Mexican American and Latina/o Studies Minor

Fifteen semester credit hours total, including:

Requirements		Hours	
MAS 301	Introduction to Mexican American and Latina/o Studies		3
One of the following courses:			3
MAS 307	Introduction to Mexican American Cultural Studies		
MAS 308	Introduction to Mexican American Policy Studies		
MAS 309	Bilingualism in the Americas		

One of the following courses:		3
MAS 361	Mexican American Cultural Studies Seminar	
MAS 362	Mexican American Policy Studies Seminar	
MAS 363	Sociolinguistics in Mexican American and Latina/o Studies	
Six additional semester credit hours Mexican American Latina/o Studies, including three upper-division		6
Please Note:		
Must include six hours	upper-division and eight hours in	

Must include six hours upper-division and eight hours in residence.

## **Middle Eastern Studies Minor**

Fifteen semester credit hours, consisting of:

Requirements		Hours	
MES 301K	Introduction to the Middle East: Religious, Cultural, and Historical Foundations		3
MES 301L	Introduction to the Middle East: Adjustment and Change in Modern Times		3
Nine hours of upper-divis	sion MES coursework chosen from:		9
MES 341	Topics in the Middle East: Social Science		
MES 342	Topics in the Middle East: Arts and Humanities		
MES 343	Topics in the Middle East: History		

## **Persian Minor**

At least 15 semester credit hours of Persian, including:

Requirements		Hours	
For students new to the	Persian language:		
PRS 601C	Intensive Persian I		6
PRS 611C	Intensive Persian II		6
PRS 322K	Intermediate Persian I		3
PRS 329	Topics in Persian Language, Literature, and Culture		3
For heritage speakers of	f Persian:		
PRS 612C	Intensive Persian for Heritage Speakers		6
PRS 322K	Intermediate Persian I		3
Six semester credit hou Language, Literature, an	rs of Persian 329, Topics in Persian d Culture		6
Please Note:			
Must include at least six	hours of upper-division courses.		
Philosophy Min	or		
Fifteen semester hours,	including:		
Requirements		Hours	
Fifteen hours of courses	work in philosophy <sup>1</sup>		15
1. Must include at least least nine hours in resid	six hours of upper-division and at ence.		

## Philosophy of Law Minor

Eighteen credit hours, including:

Requirements		Hours	
PHL 304 & PHL 347	Contemporary Moral Problems and Philosophy of Law		6
One of the following cou	rses:		3
PHL 312	Introduction to Logic		
PHL 313	Introductory Symbolic Logic		
PHL 313Q	Logic and Scientific Reasoning		
One of the following cou	rses:		3
PHL 318	Introduction to Ethics		
PHL 318K	Introduction to Political Philosophy		
Six hours chosen from the	ne following courses:		6
PHL 325C	Environmental Ethics		
PHL 322K	History of Ethics		
PHL 325K	Ethical Theories		
PHL 325L	Business, Ethics, and Public Policy		
PHL 325M	Medicine, Ethics, and Society		
PHL 342	Political Philosophy		
PHL 354	Philosophy in Context (Topic 5: Origins of Liberalism) <sup>1</sup>		
PHL 318	Introduction to Ethics (If not taken for 3 hours, above)		
PHL 318K	Introduction to Political Philosophy (If not taken for 3 hours, above)		

### 1. Prerequisite: upper-division standing

## Philosophy of Mind and Language Minor

Fifteen semester credit hours, including:

Requirements		Hours	
PHL 332	Philosophy of Language <sup>1</sup>		3
PHL 313	Introductory Symbolic Logic		3
or PHL 313Q	Logic and Scientific Reasoning		
PHL 303M	Mind and Body <sup>1</sup>		3
or PHL 323M	Philosophy of Mind		
Six additional hours cho	sen from the following courses:		6
PHL 344K	Intermediate Symbolic Logic <sup>2</sup>		
PHL 358	Philosophical Logic <sup>2</sup>		
PHL 365	Selected Problems in Philosophy (Topic 2: Introduction to Cognitive Science)		
PSY 305	Introduction to Cognitive Psychology <sup>3</sup>		
PHL 327	Contemporary Philosophy (Topic 4: Interpretation and Meaning) <sup>4</sup>		
PHL 303M	Mind and Body (if not taken above)		
PHL 323M	Philosophy of Mind (if not taken above) <sup>1</sup>		
LIN 306	Introduction to the Study of Language		
LIN 350	Special Topics in the Study of Language (Topic 2: Language and Thought) <sup>4</sup>		
LIN 353N	Natural Language Processing		

LIN 372L	Syntax and Semantics: The Structure and Meaning of Utterances <sup>5</sup>	
1. Prerequisite: 6 hou	rs of PHL completed	
2. Prerequisite: PHL 3	13, 313K, or 313Q	
3. Prerequisite: PSY 3	01 with a grade of at least a C	
4. Prerequisite: Upper	-division standing	
5. Prerequisite: Upper	-division standing and LIN 306	

## **Portuguese Minor**

The Transcript-Recognized Portuguese Minor requires students to take between 15 and 21 hours through the Spanish and Portuguese Department at The University of Texas at Austin or an accredited institution with the Study Abroad Office. At least nine hours should be categorized as in-residence.

#### Either:

Requirements	er fan man Onanish an erland.	Hours	
Lower-division Portugue	se for non-Spanish speakers:		
POR 601D	First-Year Portuguese I		6
POR 610D	First-Year Portuguese II		6
POR 611D	Second-Year Portuguese		6
One of the following cou	rses:		3
POR 327C	Advanced Grammar and Writing in Context		
POR 328C	Introduction to Literatures and Cultures		
POR 330L	Introduction to Language and Linguistics in Society		

Or:

	Hours	
se for Spanish speakers:		
Portuguese for Spanish Speakers I		6
Portuguese for Spanish Speakers II		6
ours of upper-division Portuguese		3
rses:		3
Advanced Grammar and Writing in Context		
Introduction to Literatures and Cultures		
Introduction to Language and Linguistics in Society		
	Portuguese for Spanish Speakers I Portuguese for Spanish Speakers II purs of upper-division Portuguese rses: Advanced Grammar and Writing in Context Introduction to Literatures and Cultures Introduction to Language and	Advanced Grammar and Writing in Context Introduction to Literatures and Cultures Introduction to Language and

## **Primatology Minor**

by admission only

Fifteen credit hours, including:

Requirements		Hours	
ANT 301	Biological Anthropology		3
Twelve hours from the fo	ollowing courses:		12
ANT 310L	Introductory Topics in Anthropology (A list of approved topics is available from the Anthropology Academic Adviser)		
ANT 432L	Primate Anatomy		

ANT 346L	Primate Social Behavior
ANT 346M	Comparative Primate Ecology
ANT 347C	Methods in Primate Biology
ANT 348K	Current Topics in Biological Anthropology (Topic 10: Primate Conservation)
ANT 348K	Current Topics in Biological Anthropology (Topic 12: Sex and Human Nature)
ANT 350C	Primate Sensory Ecology
ANT 351E	Primate Evolution

Please Note:

A minimum of nine hours must be upper-division.

A minimum of nine hours must be completed in residence. A student must earn a grade point average of at least 2.00 in courses taken at the University and counted toward the minor requirements.

## **Religious Studies Minor**

A student may not earn a minor in the same field of study as his or her major, and at least nine of the hours required for the minor must include coursework not used to satisfy the requirements of the student's major. However, courses in the minor may fulfill other degree requirements such as general education requirements or required elective hours.

Requirements		Hours	
R S 310	Introduction to the Study of Religion		3
Twelve hours of coursew	ork from an approved list		12
Please Note:			
Must include at least six	hours of upper-division coursework.		
Fifty percent of coursew	ork must be taken in residence.		

Specified coursework cannot include unnumbered topics.

## **Rhetoric and Writing Minor**

Fifteen hours, including:

Requirements		Hours	
RHE 321	Principles of Rhetoric		3
One of the following cou	rses:		3
RHE 330C	Advanced Studies in Digital Rhetoric		
RHE 330D	History of Rhetoric		
RHE 330E	Rhetorical Theory and Analysis		
One of the following upp	er-division courses:		3
RHE 330C	Advanced Studies in Digital Rhetoric		
RHE 330D	History of Rhetoric		
RHE 330E	Rhetorical Theory and Analysis		
RHE 325M	Advanced Writing		
RHE 328	Topics in Professional and Technical Writing for Liberal Arts Majors		
RHE 360M	Rhetoric and Writing for Teachers of English		
RHE 368E	Editing for Publication		
Two additional courses, or lower-division (see list	either upper-division (see list above) t below):		6
RHE 309K	Topics in Writing		

RHE 309S	Critical Reading and Persuasive Writing	
RHE 310	Intermediate Expository Writing	
RHE 312	Writing in Digital Environments	
RHE 315	Introduction to Visual Rhetoric	
RHE 317	Technical Writing	
Please Note:		
Must include at lo	act nine hours of upper division coursework	

Must include at least nine hours of upper-division coursework

## **Russian Minor**

At least 15 semester credit hours in Russian, including:

Requirements		Hours
RUS 506 & RUS 507	First-Year Russian I and First-Year Russian II	6-10
or RUS 601C	Intensive Russian I	
RUS 412K & RUS 412L	Second-Year Russian I and Second-Year Russian II	6-8
or RUS 611C	Intensive Russian II	
RUS 324	Third-Year Russian I	3
Please Note:		

Must include three hours of upper-division coursework.

# Russian, East European, and Eurasian Studies Minor

Fifteen credit hours, including:

Requirements		Hours	
REE 301	Introduction to Russian, East European, and Eurasian Studies		3
REE 301L	Introduction to Russian Literature		3
REE 325	Topics in Language, Literature, and Culture		3
Six additional semester hours of upper-division coursework in Russian, East European, and Eurasian Studies		6	

## **Slavic and Eurasian Languages Minor**

The Slavic language minor is for students wishing to pursue the study of Bosnian-Croatian-Serbian, Czech, Polish (or another Slavic or Eurasian language, such as Ukrainian) at intermediate and advanced levels.

Requirements For Bosnian-Croatian-Se	erbian:	Hours	
S C 506	First-Year Bosnian/Croatian/ Serbian I		5
S C 507	First-Year Bosnian/Croatian/ Serbian II		5
S C 312K & S C 312L	Second-Year Bosnian/Croatian/ Serbian I and Second-Year Bosnian/Croatian/ Serbian II	,	6
S C 325	Third-Year Bosnian/Croatian/ Serbian I		3
For Czech:			
CZ 506	First-Year Czech I		5
CZ 507	First-Year Czech II		5
CZ 412K & CZ 412L	Second-Year Czech I and Second-Year Czech II		8
CZ 325	Third-Year Czech I		3

#### For Polish:

I OI F OIISII.		
POL 506	First-Year Polish I	5
POL 507	First-Year Polish II	5
POL 312K & POL 312L	Second-Year Polish I and Second-Year Polish II	6
POL 325	Third-Year Polish I	3
Other Slavic and Eurasia	n Languages:	
SEL 506	First-Year Slavic and Eurasian Languages I	5
SEL 507	First-Year Slavic and Eurasian Languages II	5
SEL 312K & SEL 312L	Second-Year Slavic and Eurasian Languages I and Second-Year Slavic and Eurasian Languages II	6
or SEL 611C	Intensive Slavic and Eurasian Languages II	
Three hours of upper-divi Eurasian Languages	sion coursework in Slavic and	3

## **Sociology Minor**

Fifteen semester hours, including:

Requirements		Hours	
SOC 302	Introduction to the Study of Society		3
Twelve additional hours	of sociology coursework		12
Please Note:			
At least six hours must	be upper-division coursework.		
Nine of the required sen residence.	nester hours must be taken in		

## **Turkish Minor**

Between 15 and 21 hours of Turkish, including:

Requirements		Hours
TUR 506 & TUR 507	First-Year Turkish I and First-Year Turkish II	6-10
or TUR 601C	Intensive Turkish I	
TUR 412K & TUR 412L	Second-Year Turkish I and Second-Year Turkish II	6-8
or TUR 611C	Intensive Turkish II	
Three hours upper-division	on Turkish	3

## UTeach-Liberal Arts Minor

### by admission only

The University recommends students for teacher certification to TEA. To be recommended for a certificate to teach in secondary school, an undergraduate student must earn a degree as well as complete an approved teacher certification program, of which the coursework below is only a part.

Admissions Requirements

- The UTeach-Liberal Arts undergraduate program requires at least a four long-semester commitment.
- The program is open to current undergraduates at The University of Texas at Austin and incoming transfer students.
- Students are eligible to enter the program second semester freshman year through senior year.

· Admission to UTeach-Liberal Arts requires a minimum overall GPA of 2.5 at the University.

**Application Process** 

- 1. Complete the UTeach-Liberal Arts Undergraduate Program Application. Our Program Adviser will notify you about your admissions status via email within 5-10 business days of your application submission.
- 2. Once Admitted, you will receive instructions on how to reserve a spot for UTL 101 "Introduction to Teaching", the first UTeach course.

Once you have reserved a spot, you may register for the course during your normal registration access period. Failure to register for your spot will result in losing your reservation in UTL 101.

Fifteen semester hours of required UTeach coursework must be completed as follows:

Requirements		Hours	
UTL 101	Introduction to the Teaching Profession		1
UTL 202	Introduction to Teaching in the Middle School		2
EDP 350G	Adolescent Development		3
Six hours chosen from:			6
UTL 640	Teaching in Secondary Schools (LOTE)		
UTL 640	Teaching in Secondary Schools (English)		
UTL 640	Teaching in Secondary Schools (Social Studies)		
Three hours chosen from	n:		3
ALD 322	Individual Differences (SEC)		
ALD 322	Individual Differences		
Please Note:			

Coursework for the UTeach-Liberal Arts program is dictated by the State Coordinating Board for Higher Education and the State Board for Educator Certification, not by University catalogs. Therefore, changes in requirements may be independent of major and university requirements and may take place at any time.

State of Texas teacher certification requirements are governed by the Texas Education Agency and are subject to change. Students must adhere to current teacher certification requirements, even if they differ from those listed in the University catalogs.

## Women's and Gender Studies Minor

by admission only

Fifteen credit hours, including:

### Requirements

н	n	ır	S

3

One of the following courses:			
WGS 301	Introductory Topics in Women's and Gender Studies		
WGS 303	Introduction to Lesbian, Gay, Bisexual, Transgender, and Queer Studies		
WGS 305	Introduction to Women's and Gender Studies		

WGS 340	Cross-Cultural Topics in Women's and Gender Studies	3
WGS 340	Cross-Cultural Topics in Women's and Gender Studies (Different WGS 340 topic from that counted above, or other upper-division course in Women's and Gender Studies)	3
WGS 350	Feminist Theory (or other upper- division courses in Women's and Gender Studies)	3
Three additional hours of	Women's and Gender Studies	3

## **Certificate Programs**

The College of Liberal Arts offers several certificate programs, which are open to all degree-seeking University undergraduates. Undergraduates who complete certificate requirements in conjunction with their degree requirements or within one year after earning the degree receive recognition on the University transcript; students in integrated undergraduate/graduate programs must complete certificate requirements within one year after they complete their undergraduate degree requirements. A maximum of nine semester hours of certificate coursework may be taken after the student has earned the undergraduate degree. At least half of the required certificate coursework must be completed in residence at the University; some programs may require more work in residence.

A student may not earn a certificate in the same field as his or her major, and may not count the certificate towards their minor requirement if more than six hours of the certificate's coursework may also be counted toward the requirements of the major. A certificate counted in place of a minor must meet the minimum requirements for a minor. However, certificate courses outside the major may be counted toward other degree requirements. For certificates not counting toward the minor requirement, at least one certificate course must be outside the requirements of the major.

Students should apply for the certificate when they apply for graduation or when they complete the certificate program, whichever is later. Transcript recognition is awarded at the end of that semester or summer session.

Students outside the College of Liberal Arts should contact their dean's office for permission to complete a certificate program and for the applicability of certificate requirements toward their individual degrees. Students in the College of Liberal Arts may complete certificate programs offered through other colleges. These are described in Transcript-Recognized Certificate Programs (p. 13) and by each college that offers a transcript-recognized certificate program. Certificate programs that do not lead to transcript recognition are also described in the respective college's catalog section.

## African Studies Certificate

The African Studies Certificate allows students to engage with scholarship on African peoples, cultures, and history through the theoretical lens of black studies. Through the certificate, undergraduates develop interdisciplinary expertise in African studies related to the student's personal field of interest. The African and African Diaspora Studies undergraduate adviser (AADS) is available to steer certificate candidates towards areas of interest, which can include: expressive cultures, gender and sexuality studies, literature, language, history, politics, and society as these topics relate to theories of blackness on the African continent.

The certificate program requires 18 semester hours of coursework, including at least nine semester hours completed in residence.

Courses the student has completed at the time of application to the program may be counted toward the certificate. Students may not earn a certificate in the same field of study as their major and at least one course counting toward this certificate must be taken outside of the requirements of the student's undergraduate degree. Students apply for transcript-recognized undergraduate academic certificates at the time they complete their undergraduate degree or the certificate program, whichever comes later. Transcript recognition is awarded at that time.

Students must fulfill the following requirements:

Requirements		Hours	
AFR 304	Introduction to the Study of Africa <sup>1</sup>		3
AFR 310K	Introduction to Modern Africa <sup>1</sup>		3
Twelve additional semester hours (upper- or lower-division) chosen from courses on an approved list or with prior			12

approval from AADS <sup>2</sup>

Please Note:

The student must earn a grade of at least C in each of the courses taken to fulfill the African Studies Certificate requirements.

Each semester, the list of approved courses that meet the requirements above is available in the Department of African and African Diaspora Studies undergraduate advising office.

1. Or an alternative course taken with approval from AADS.

2. One of the courses must carry a writing flag from the School of Undergraduate Studies and/or place an emphasis on research and writing, such as African and African Diaspora Studies 372G or an alternative course taken with approval from AADS

## **Business Spanish Certificate**

Between 18 and 24 semester credit hours of Spanish, consisting of:

Requirements		Hours	
For non-heritage speake	rs:		
SPN 601D	First-Year Spanish I		6
SPN 610D	First-Year Spanish II		6
SPN 611D	Second-Year Spanish		6
SPN 327C	Advanced Grammar and Writing in Context		3
or SPN 327N	Academic Writing for Heritage Spea	kers	
SPN 367P	Spanish for the Professions (Topic 2: Business in Hispanic Life and Culture)		3
Requirements For heritage speakers:		Hours	
SPN 604	Accelerated Introductory Spanish for Heritage Learners		6
SPN 612	Accelerated Intermediate Spanish for Heritage Learners		6
SPN 327C	Advanced Grammar and Writing in Context		3
or SPN 327N	Academic Writing for Heritage Spea	kers	

SPN 367P

Spanish for the Professions (Topic 2: Business in Hispanic Life and Culture)

# Computational Science and Engineering Certificate

The Computational Science and Engineering Certificate program is sponsored by the Cockrell School of Engineering, the Jackson School of Geosciences, the College of Liberal Arts, and the College of Natural Sciences; it is administered by the Institute for Computational Engineering and Sciences (ICES). Information regarding the specific requirements of the Certificate can be found in the Cockrell School of Engineering's Minor and Certificates (p. 227) section of the Undergraduate Catalog.

## **Core Texts and Ideas Certificate**

The certificate program in core texts and ideas is designed to provide a coherent path through the University's core curriculum with an integrated, interdisciplinary sequence of courses on great works of philosophy, literature, science, and the arts that emphasizes debates about fundamental questions of enduring human concern. The program provides a grounding in the major ideas that have shaped the Western world and gives students the opportunity to study Eastern works as well. Students complete courses in four required areas and two elective areas. The four required areas are the philosophy and literature of the ancient world, especially Greece; major religious texts and their interpreters; the history of political philosophy; and the principles that formed the basis for the founding of the United States. Elective areas include philosophy, the arts, history, literature, and the history and philosophy of science and mathematics.

The certificate program requires 18 semester hours of coursework, including at least 6 hours of upper division coursework and at least 12 hours completed in residence. Students must fulfill the following requirements:

Requirements		Hours	
The requirements of an undergraduate major			
The following 12 semest	er hours of coursework:		12
CTI 301G	Introduction to Ancient Greece		
CTI 302	Classics of Social and Political Thought		
CTI 304	World Religions: Traditions and Texts		
GOV 312P	Constitutional Principles: Core Texts <sup>1</sup>		
Six additional upper-division semester credit hours of coursework chosen from a list of approved electives.			6
Please Note:			
All courses must be take	n on the letter-grade basis.		
semester are available fr	list of approved electives for each om the academic adviser in the r for the Study of Core Texts and		
1. Or approved alternativ Plan	es as listed on the CTI Certificate		

## **Creative Writing Certificate**

The Creative Writing Certificate is intended for any University student interested in advanced study of creative writing, both as reader and as writer. Those who plan to pursue the certificate should apply to the program adviser for admission no later than the end of their sophomore year. More information about the Creative Writing Certificate is given at the Department of English website (http://www.utexas.edu/cola/depts/ english/undergraduate-program/creative-writing.php).

The certificate program requires 18 semester hours of coursework, including at least nine hours completed in residence. Students must fulfill the following requirements:

Requirements		Hours	
The requirements of an u	The requirements of an undergraduate major		
Six semester hours of co dance, or radio-televisior	oursework from English, theatre and n-film.		6
One of the following cou	rses:		3
CRW 315D	Playwriting I		
CRW 325F	Fiction Writing		
CRW 325M	Creative Writing		
CRW 325P	Poetry Writing		
One of the following cou	rses:		3
CRW 340D	Playwriting II		
CRW 340F	Short Story Workshop		
CRW 340P	Poetry Workshop		
CRW 660A	Intensive Creative Writing (Part A)		
One of the following courses:			3
CRW 355D	Playwriting III		
CRW 355F	Advanced Fiction Workshop		
CRW 355P	Advanced Poetry Workshop		
CRW 660B	Intensive Creative Writing (Part B)		
	f coursework chosen from a list of ble from the program adviser		3
Please Note:			
	grade of at least C- in each course ve Writing Certificate requirements.		

### **Honors Option**

To earn an Honors Creative Writing Certificate, students must fulfill the following additional requirements:

- 1. Creative Writing 370H, Honors Creative Writing Project, with a grade of at least A-
- 2. A University Grade Point Average (GPA) of at least 3.66 in the coursework required for the Creative Writing Certificate and a cumulative University GPA of at least 3.33.

## **Digital Humanities Certificate**

The digital humanities represent the area of study where humanities disciplines and studies in information engage digital tools, archives, artifacts, and information technologies. This certificate is designed to introduce students to the ideas, materials, and computational tools that underlie this field. It is open to students of all majors. Students take 18 credit hours from a selection of courses taught in different departments and colleges at The University of Texas at Austin and must earn a letter grade of *C*- or better in all courses required for certification. Some

courses required by the certificate may also fulfill degree requirements established by a student's major department.

To earn the certificate, students must take:

Requirements		Hours	
Introduction to the Digita			3
INF 315E	Information and Culture (Topic: Introduction to Digital Humanities)		
Twelve hours of coursew based course	vork including at least one methods-		12
Skills			
AET 305	Foundations of Music Technology		
AET 306	Foundations of Digital Imaging and Visualization		
AET 323	Film and Game Scoring		
AET 325	Digital Production Art 2-D		
AET 326	Digital Production Art 3-D		
AET 327	Advanced 3-D Modeling		
ART 318C	Transmedia: Digital Time-Art I		
ART 338C	Transmedia: Digital Time-Art II		
ART 358C	Transmedia: Digital Time-Art III		
INF 315E	Information and Culture (Topic: Introduction to Databases)		
INF 350G	Information in Society (Topic:		
	Introduction to Audio Preservation and Reformatting)		
J 339T	Topics in Specialized Journalistic Skills (Topic 1: Mapping in Storytelling)		
MUS 319D	Foundations of Digital Sound and Music		
Electives			
CMS 348K	Visual Media and Interaction		
CMS 341	Digital Communications		
INF 304D	Introduction to Information Studies		
INF 315E	Information and Culture (Topic: Human Computer Interaction)		
INF 315E	Information and Culture (Topic: Introduction to Digital Cultures)		
INF 327E	Information and People (Topic: Comics, Graphic Novels, and Manga)		
INF 327E	Information and People (Topic: Media & Literacy)		
INF 350E	Information Technology (Topic: Concepts and Practices in Information Security)		
INF 331C	Beyond Google		
INF 335C	Information in Cyberspace		
INF 350E	Information Technology (Topic: Information Ethics)		
INF 350E	Information Technology (Topic 1: Technologies of the Book)		
INF 350G	Information in Society (Topic: Historical Museums: Context and Practice)		
J 336F	Social Media Journalism		
J 355F	Living in the Information Age		

	RHE 309K	Topics in Writing (Approved title)	
	RHE 330C	Advanced Studies in Digital Rhetoric (Topic: Digital Rhetorics of Satire)	
	RHE 330C	Advanced Studies in Digital Rhetoric (Topic 8: Writing with Sound)	
	RHE 330C	Advanced Studies in Digital Rhetoric (Topic 9: Digital Self and Rhetoric)	
	RTF 331P	Topics in New Communication Technologies (Topic: Internet Cultures)	
	RTF 326C	Tech Culture	
	MUS 329E	Introduction to Electronic Media	
	MUS 329J	Introduction to Computer Music	
A	capstone course involv	ring project-based Digital Humanities	3
W	ork		
	AHC 679HB	(Honors Tutorial Course)	
	GOV 679HB	(Honors Tutorial Course)	
	HIS 679HB	(Honors Tutorial Course)	
	LAH 679TB	(Honors Thesis)	
	LIN 679HB	(Honors Tutorial Course)	
	MES 679HB	(Honors Tutorial Course)	
	PHL 679HB	(Honors Tutorial Course)	
	RHE 330C	Advanced Studies in Digital Rhetoric	
	RHE 679HB	Honors Tutorial Course	
	R S 679HB	(Honors Tutorial Course)	
	REE 679HB	(Honors Tutorial Course)	
	POR 379H	Honors Tutorial Course	
	SPN 377H	Honors Tutorial Course	
	UGS 320K	Undergraduate Research Experience	
	UGS 320L	Undergraduate Research Experience	
Р	lease Note:		

#### Please Note:

Capstone courses may also be arranged as individual study courses between one student and one faculty member.

### **German Certificate**

At least 18 semester credit hours in German, including:

Requirements	Hours
Eighteen hours of German coursework <sup>1</sup>	18

1. At least six of which must be upper-division hours.

## History and Philosophy of Science Certificate

The History and Philosophy of Science Certificate provides students an opportunity to gain a coherent, cross-disciplinary command of the methods and findings that the liberal arts have contributed to our understanding of the sciences. Students analyze the dynamic development, concepts, and roles in society of various sciences, as well as the personal, dramatic struggles of famous scientists. Students must complete four courses in two required areas: history of science, and philosophy of science, as well two electives to be selected from a list of pre-approved courses in history, philosophy, astronomy, physics, or core texts and ideas.

The certificate program requires 18 semester hours of coursework, of which at least 12 semester hours of coursework must be upper-division, and including at least nine semester hours completed in residence.

Courses the student has completed at the time of application to the program may be counted toward the certificate. Students apply for transcript-recognized undergraduate academic certificates at the time they complete their undergraduate degree or the certificate program, whichever comes later. Transcript recognition is awarded at that time. More information is available at the Certificate on History and Philosophy of Science website: http://liberalarts.utexas.edu/hps/index.php

Students must fulfill the following requirements:

Requirements		Hours	
Six semester credit hours	s chosen from the following courses:		6
HIS 322D	The Scientific Revolution of the Seventeenth Century		
HIS 322M	History of Modern Science		
HIS 322G	History of the Modern Life Sciences		
HIS 329P	History of the Atomic Bomb		
HIS 350L	Undergraduate Seminar in History (Topic 32: The Galileo Affair)		
HIS 350L	Undergraduate Seminar in History (Topic 64: Einstein in the Age of Conflict)		
PHL 313	Introductory Symbolic Logic		3
or PHL 363	Scientific Method		
One of the following cou	rses:		
PHL 316K	Science and Philosophy		
PHL 322	Science and the Modern World		
PHL 363L	Topics in Philosophy of Science		
Six additional semester of approved list	credit hours, chosen from an		
Please Note:			
Each semester, the list of	f approved courses that meet the		

Each semester, the list of approved courses that meet the requirements above is available in the Department of History undergraduate advising office.

### Ibero-American Cultural Diversity Certificate

Eighteen semester credit hours, consisting of:

Requirements		Hours	
Six hours chosen from the	ne following courses:		6
SPC 320C	Topics in Iberian or Latin American Studies (Topic 1: Jewish Voices from Latin America)		
SPC 320C	Topics in Iberian or Latin American Studies (Topic 2: Mediascapes: Literature and Media in the Caribbean)		
Three hours chosen from	n one of the following courses:		3
PRC 320E	Topics in Brazilian Studies (Topic 2: Global Brazil: Immigration and Diaspora in Brazilian Culture)		
PRC 320E	Topics in Brazilian Studies (Topic 3: Afro-Luso-Brazilian Worlds)		

Nine additional semester credit hours, chosen from an approved list

### **Indigenous Studies Certificate**

The main goal of the indigenous studies certificate program is to encourage active intellectual and community engagement with indigenous peoples and cultures. The program allows undergraduate students to develop interdisciplinary expertise in indigenous studies and comparative approaches to their primary field of interest. Each student develops a specialization within the program that is tailored to his or her academic and professional development. Students concentrate their studies in two of the following eight strands: Mayan culture, Mesoamerica, indigenous arts, indigenous peoples of Latin America, indigenous peoples in the United States and Canada, indigenous peoples of the Americas, indigenous politics and human rights, and indigenous writing and language.

Courses the student has completed at the time of application to the program may be counted toward the certificate. Upon completion of the course requirements, the student writes a three- to four-page essay that describes his or her intellectual work in the program and how the experience contributed to his or her academic career at the University.

The certificate program requires 18 semester hours of coursework, including at least nine semester hours completed in residence. Students must fulfill the following requirements:

Requirements		Hours	
The requirements of an undergraduate major			
	a lower-division introductory or h indigenous studies content, such		3
E 314V	Introduction to Literature and Culture (Topic 5: Native American Literature and Culture)		
HIS 317L	Topics in United States History (Topic 3: Introduction to Native American History)		
Or other courses fron	n an approved list		
Six semester hours of a the following eight strar	pproved coursework in each of two of nds:		12
Mayan culture			
Mesoamerica			
Indigenous arts			
Indigenous peoples o	f Latin America		
Indigenous peoples in	n the United States and Canada		
Indigenous peoples o	f the Americas		
Indigenous politics a	nd human rights		
Indigenous writing ar	nd language		
	ion capstone course in indigenous urses on an approved list		3
Please Note:			
At least three courses m outside of the student's	nust be taken in a field of study major department.		
	approved courses that meet the vailable in the Department of luate advising office.		

Japanese Certificate

9

Twenty-four semester credit hours, consisting of the following (or their equivalents):

Requirements		Hours	
JPN 601D	Japanese I		6
JPN 610D	Japanese II		6
JPN 611D	Intermediate Japanese		6
JPN 317C	Japanese Grammar, Composition, and Conversation		3
Three hours upper-divisi	on Japanese		3

Three hours upper-division Japanese

### Lesbian, Gay, Bisexual, Transgender, and **Queer/Sexualities Studies Certificate**

The certificate program requires 18 semester hours of coursework, including at least nine semester hours completed in residence.

Courses the student has completed at the time of application to the program may be counted toward the certificate. Students apply for transcript-recognized undergraduate academic certificates at the time they complete their undergraduate degree or the certificate program, whichever comes later. Transcript recognition is awarded at that time.

Students must fulfill the following requirements:

Requirements		Hours	
WGS 303	Introduction to Lesbian, Gay, Bisexual, Transgender, and Queer Studies		3
or WGS 305	Introduction to Women's and Gende	r Studies	
Six hours in the following	course:		6
WGS 335	Topics in Lesbian, Gay, Bisexual, Transgender, and Queer Studies <sup>1</sup>		
Nine additional upper-div the following courses: <sup>2</sup>	ision semester hours chosen from		9
WGS 335	Topics in Lesbian, Gay, Bisexual, Transgender, and Queer Studies		
An upper-division WGS	Scourse		
Another course approv Cluster chair <sup>3</sup>	ved by LGBTQ/Sexualities Research		
Please Note:			
requirements above is av and Gender Studies unde	approved courses that meet the ailable in the Center for Women's rgraduate advising office. The list "Pink Book" is published on the dies website.		
	grade of at least a C in each of II the LGBTQ/Sexualities Studies		
1. Choose any two topics			
2. At least three of these the student's major field of	hours must be taken from outside of study.		
3. See the listings in the I	Pink Book for suggested courses.		
Security Studies	s Certificate		

The Certificate in Security Studies recognizes students who focus their studies on international and national security affairs. Through the certificate, students develop an interdisciplinary expertise and practical job experience in security studies, including: diplomacy, defense,

intelligence, foreign policy, homeland security, international affairs, international development, human rights, war, conflict, peace, and related fields. Students are required to take 21 credits hours across at least two different departments, including at least nine completed in residence, and complete an internship in a field related to security studies.

This certificate is open to students in the College of Liberal Arts.

Requirements		Hours	
GOV 360N	Topics in International Relations (Topic 12: International Security)		3
GOV 362L	Government Research Internship		3
Fifteen additional credit hours total chosen from at least two different departments, drawn from a list available on the certificate's website <sup>1</sup>			15
Please Note:			
	rses on a grade basis and earn a verage of a 3.0 to fulfill certificate		

 At least nine credit hours must be taken in residence at The University of Texas at Austin.

#### Internship:

Students must successfully complete an internship. Students will enroll in Government 362L, *Government Research Internship*, and will receive 3 credit hours for the internship.

- Students are responsible for identifying internship opportunities, applying for internships, informing the Faculty Committee of their internship plans, submitting a proposal for an internship to satisfy the certificate requirement, and submitting proof that the internship was completed.
- Internships must involve substantive work that exposes students to the professional work environment and offers opportunities for networking in their chosen career fields.
- Internships may be with government agencies, think tanks, NGOs, research centers, consulting firms, or other entities that offer professional job experience.
- Internships may be in the fields of diplomacy, defense, intelligence, foreign policy, national security, homeland security, international affairs, international development, human rights, and related fields.
- The Faculty Committee reviews students' internship experience to ensure it is relevant to security studies and was satisfactorily completed.
- Internships must last a minimum of six weeks of full-time work, or its equivalent (240 hours).
- · Internships may be in the United States or abroad.
- · Internships may be paid or unpaid.
- Students who accept unpaid internships are invited to apply for a stipend through the Clements Center for National Security's Summer Student Development Fund. Funds are limited and stipends are not guaranteed for certificate students.

Waivers: Students may waive the internship requirement if they are enrolled in ROTC; have prior military experience with no major disciplinary actions against them; or have extensive prior civilian job experience directly related to security studies. The Faculty Committee reviews applications to waive the internship requirement.

# Spanish for the Medical Professions Certificate

Between 18 and 24 semester credit hours of Spanish, consisting of:

Requirements		Hours	
For non-heritage speakers:			
SPN 601D	First-Year Spanish I		6
SPN 610D	First-Year Spanish II		6
SPN 611D	Second-Year Spanish		6
SPN 327C	Advanced Grammar and Writing in Context		3
or SPN 327N	Academic Writing for Heritage Spea	kers	
SPN 367P	Spanish for the Professions (Topic 1: Spanish for Health Care Professions)		3
Requirements		Hours	
For heritage speakers:			
SPN 604	Accelerated Introductory Spanish for Heritage Learners		6
SPN 612	Accelerated Intermediate Spanish for Heritage Learners		6
SPN 327C	Advanced Grammar and Writing in Context		3
or SPN 327N	Academic Writing for Heritage Spea	kers	
SPN 367P	Spanish for the Professions (Topic 1: Spanish for Health Care Professions)		3

## Courses

The faculty has approval to offer the following courses in the academic years 2018-2019 and 2019–2020; however, not all courses are taught each semester or summer session. Students should consult the *Course Schedule* (http://registrar.utexas.edu/schedules) to determine which courses and topics will be offered during a particular semester or summer session. The *Course Schedule* may also reflect changes made to the course inventory after the publication of this catalog.

A full explanation of course numbers is given in *General Information* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/credit-value-and-course-numbers). In brief, the first digit of a course number indicates the semester hour value of the course. The second and third digits indicate the rank of the course: if they are 01 through 19, the course is of lower-division rank; if 20 through 79, of upper-division rank; if 80 through 99, of graduate rank.

## Liberal Arts

### Liberal Arts: L A

### **Lower-Division Courses**

### L A 101L. Introduction to the Liberal Arts.

Topics related to exploring the various disciplines in the College of Liberal Arts. One lecture hour a week for one semester, or as required by the topic. May be repeated for credit when the topics vary.

### L A 101M. Liberal Arts to Career.

One lecture hour a week for one semester. Only one of the following may be counted: Liberal Arts 101L (Topic: Liberal Arts Major in the Workplace), 101M, Liberal Arts Honors 104H. Offered on the lettergrade basis only. Prerequisite: Thirty semester hours of coursework and consent of the Liberal Arts Career Services office.

### L A 101P. Creating Your Academic Pathway.

Restricted to first-year students. Focuses on opportunities within the College of Liberal Arts, academic success, extracurricular support, and professional development. One lecture hour a week for one semester. Liberal Arts 101L (Topic: Liberal Arts Pathways/Planning) and 101P may not both be counted. Offered on the pass/fail basis only.

### L A 001Q. First-Year Seminar.

Restricted to first-year students. One discussion hour a week for one semester. Offered on the pass/fail basis only. Prerequisite: Concurrent enrollment in Liberal Arts 101P.

### L A 302. Critical Thinking Seminar.

An examination of fundamental concepts in critical thinking, including the role of intellectual virtues, an analysis of the elements of thought, Socratic thinking, and the application of universal intellectual standards. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Liberal Arts 302 and Natural Sciences 302 may not both be counted. May not be repeated for credit.

### L A 104R. Community Service.

Restricted to recipients of the Rapoport Service Scholarship. Tutorial course, in which students submit reports based on service learning and appropriate supplementary reading. The equivalent of one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Consent of instructor.

Topic 1: Leadership, Ethics, and Society. Topic 2: Civic Engagement and Civic Responsibility.

### L A 110. Internship.

Restricted to students in the College of Liberal Arts. Students work in a professional environment and apply analysis, communication, and other academic skills to practical work. The equivalent of one lecture hour and ten hours of fieldwork a week for one semester. May be repeated for credit. Offered on the pass/fail basis only. Prerequisite: Completion of at least thirty semester hours of coursework, a University grade point average of at least 2.25, and consent of instructor.

### L A 112C, 212C. Topics in Community Engagement.

One or two lecture hours and five to seven community engagement hours a week for one semester. May be repeated for credit when the topics vary. Offered on the pass/fail basis only.

### L A 113P, 213P. Topics in Peer Mentoring.

One or two lecture hours and five to seven mentoring hours a week for one semester. May be repeated for credit when the topics vary. Offered on the pass/fail basis only.

### L A 119, 219, 319. International Learning Seminars.

Restricted to students participating in a study abroad program. Discussion of various issues related to the academic, cultural, and personal aspects of completing academic work in international locations. For each semester hour of credit earned, one lecture hour a week for one semester. Liberal Arts 119, 219, 319 and Undergraduate Studies 119 may not both be counted unless the topics vary. Liberal Arts 119, 219, 319 and 129, 229, 329 may not both be counted. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

### **Upper-Division Courses**

### L A 320. Internship.

Designed to establish the academic foundations of an internship course in the liberal arts. Students integrate knowledge derived from their academic studies with the experiences gained in an internship setting. The equivalent of three lecture hours and ten hours of fieldwork a week for one semester. May be repeated for credit. Prerequisite: Completion of at least thirty semester hours of coursework, a University grade point average of at least 2.25, and consent of instructor.

## L A 220L, 320L, 420L, 520L, 620L. Military Leadership Internship.

Restricted to students participating in an approved ROTC program. Field leadership training program. For each semester hour of credit earned, one week of full-time fieldwork. Some programs may also require classroom hours. Offered during the summer session only. No more than six semester hours of this course may be counted toward any degree. Offered on the pass/fail basis only. Prerequisite: Upper-division standing.

### L A 621. International Internship.

Restricted to students participating in a study abroad program. One lecture hour and seven and one-half laboratory hours a week for one semester; with additional fieldwork hours to be arranged. Prerequisite: Upper-division standing.

### L A 321F. French Studies Internship.

Restricted to students pursuing a French Studies major. The equivalent of three lecture hours a week for one semester. Prerequisite: Thirty semester hours of coursework and consent of the director of Liberal Arts Career Services.

### L A 321J. Italian Studies Internship.

Restricted to students pursuing a major in Italian Studies. The equivalent of three lecture hours a week for one semester. Prerequisite: Thirty semester hours of coursework and consent of the director of Liberal Arts Career Services.

### L A 321M. Health and Society Internship.

Restricted to health and society majors. The equivalent of three lecture hours a week for one semester. Prerequisite: Thirty semester hours of coursework and consent of the director of Liberal Arts Career Services.

### L A 321S. Security Studies Internship.

Restricted to students pursuing a Security Studies certificate. Three lecture hours a week for one semester. Prerequisite: Thirty semester hours of coursework and consent of the director of Liberal Arts Career Services.

### L A 125, 225, 325. Topics in the Liberal Arts.

Analysis of topics in the philosophy and real-life application of the liberal arts. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. Additional meeting times may be required. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing. Additional prerequisites vary with the topic.

### L A 129, 229, 329. International Learning Seminars.

Restricted to students participating in a study abroad program. Discussion of various issues related to the academic, cultural, and personal aspects of completing academic work in international locations. For each semester hour of credit earned, one lecture hour a week for one semester. Liberal Arts 129, 229, 329 and Undergraduate Studies 119 may not both be counted unless the topics vary. Liberal Arts 119, 219, 319 and 129, 229, 329 may not both be counted. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: Upper-division standing.

### L A 131R, 231R, 331R. Research Internship.

Restricted to students in the College of Liberal Arts. For every semester hour of credit earned, three hours of fieldwork a week for one semester. May be repeated for credit, but no more than six hours may be counted toward degree requirements. Prerequisite: Upper-division standing, a grade point average of at least 2.50, and written consent of instructor.

## **Liberal Arts Honors**

## Liberal Arts Honors: LAH

### **Lower-Division Courses**

### LAH 102H, 202H, 302H. The Idea of the Liberal Arts.

Restricted to students in the Freshman Honors Program in the College of Liberal Arts. An overview of the liberal arts disciplines. One, two, or three class hours a week for one semester. Additional hours may be required. Offered on the pass/fail basis only.

### LAH 103H. The Ideas of Civic Engagement.

Restricted to students in the Liberal Arts Honors Program in the College of Liberal Arts. Introduces Liberal Arts Honors students to the resources of the University, their history, and how to make best use of them. Provides guidance on internships, scholarships, and career paths, encouraging students to prepare for a lifetime of civic engagement and public service. One lecture hour a week for one semester, with additional hours to be arranged Humanities 116 and Liberal Arts Honors 103H may not both be counted. Offered on the pass/fail basis only. Prerequisite: Liberal Arts Honors 102H.

### LAH 104H. Professionalization and Career Development.

Restricted to students in the Liberal Arts Honors Program in the College of Liberal Arts. Introduction to the ideas, concepts, and best practices of career development, professionalization and professional online brand management. Provides guidance on internships and career paths working in conjunction with Liberal Arts Career Services. One and onehalf lecture hours a week for one semester. Liberal Arts 101M and Liberal Arts Honors 104H may not both be counted. Offered on the pass/fail basis only.

### LAH 305. Liberal Arts Freshman Honors Seminar.

Restricted to students in the Freshman Honors Program in the College of Liberal Arts. Intensive small class lecture or seminar course addressing basic issues in various liberal arts disciplines. Lectures, readings, discussions, examinations. Three lecture hours a week for one semester. Humanities 305 and Liberal Arts Honors 305 may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

**Topic 1: Reacting to the Past.** Liberal Arts Honors 305 (Topic 1) and 305 (Topic: Reacting to the Past) may not both be counted. Offered on the letter-grade basis only.

### LAH 112H. The Nature of Inquiry.

Designed for students who plan to enter a liberal arts departmental honors program. Introduction to the nature of research in liberal arts disciplines. One and one-half class hours a week for one semester. Prerequisite: Forty-five semester hours of coursework and consent of the liberal arts honors director.

### LAH 316. Studies in the Liberal Arts.

Restricted to Plan I majors in the College of Liberal Arts. Intensive lecture or seminar course addressing topics in various liberal arts disciplines.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

### LAH 318Q. Supervised Research.

Individual instruction. Prerequisite: Consent of the liberal arts honors program adviser.

### **Upper-Division Courses**

### LAH 350. Topics in the Liberal Arts.

Restricted to Plan I majors in the College of Liberal Arts. Intensive lecture course treating topics from a variety of disciplinary perspectives, taught by instructors from various departments. Lectures, readings, discussions, examinations. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upperdivision standing and a grade point average of at least 3.50.

**Topic 1: Defense Policy.** Articulation of national security strategy through decisions about Department of Defense organization and resources. Overview of military terms and organizing principles with an emphasis on policy, personnel, acquisition, budget, intelligence, and leadership. Only one of the following may be counted: Government 360N (Topic: Defense Policy), Liberal Arts Honors 350 (Topic: Defense Policy), 350 (Topic 1), Public Affairs 325 (Topic: Defense Policy).

**Topic 2: Our Lives In Fiction.** Examines the hypothesis that human beings have and continue to create and recreate themselves through the telling of stories. Explores the concept that stories help define what is significant, what is praiseworthy, and what it is we should value and why. Only one of the following may be counted: Core Texts and Ideas 345 (Topic: Our Lives in Fiction), Liberal Arts Honors 350 (Topic: Our Lives in Fiction), 350 (Topic 2).

**Topic 3: Technical Change and Financial Crisis.** Explores the economics of the business firm, the management of technical change, and the interaction between technology and finance in the writings of major twentieth century economists. Emphasis on attempting to understand the social and income-distributional consequences of technical change, the potential for system instability, and the dilemmas of public policy in this area. Liberal Arts Honors 350 (Topic: Technical Change and Financial Crisis) and 350 (Topic 3) may not both be counted.

**Topic 4: Literature of World War I.** Same as Humanities 350 (Topic 10). Selected readings from autobiographies, poetry, fiction, and memoirs, primarily about the Western Front, by German, British, and American authors; a short history of World War I; readings of a central book of literary analysis; exploration of the nature of war, the experience of combatants, and the legacy of the war itself and its unique literature. Only one of the following may be counted: Humanities 350 (Topic: Literature of the Great War), 350 (Topic 10), Liberal Arts Honors 350 (Topic: Literature of the Great War), 350 (Topic 4).

**Topic 5: Modern Masters of the Novel.** An examination of a range of subjects and styles that distinguish the capacity of the novel to reflect private lives and public moments. Focuses on nineteenth and twentieth century British and American novelists such as George Eliot, Philip Roth, Ford Maddox Ford, and Graham Greene. Only one of the following may be counted: Humanities 350 (Topic: Novels of Distinction), Liberal Arts Honors 350 (Topic: Novels of Distinction), 350 (Topic 5).

**Topic 6: Documentary Film and Inquiry.** Examines how narrative accounts such as documentary film, biography, or other non-fiction work impact the interpretation of significant events. A component of the class includes individual or collaborative research on a chosen topic and presentation of a life history project via a narrative description, video, photography, or other medium. Only one of the following may be counted: Educational Psychology 369K (Topic: Life History and Documentary Approaches to Inquiry), Liberal Arts Honors

350 (Topic: Life History and Documentary Approaches to Inquiry), 350 (Topic 6).

**Topic 7: Power and Belief in Early Modern Europe.** The historical and cultural processes that lead people to change the way they look at the world, and also brought some early modern Europeans to argue for religious toleration - first as a practical matter, and eventually as a matter of principle. Only one of the following may be counted: History 350L (Topic: Spinoza's World), Liberal Arts Honors 350 (Topic: Spinoza's World), 350 (Topic 7).

**Topic 8: The Decolonization of the British Empire.** Explores the era of decolonization of the British empire after World War II. Only one of the following may be counted: History 350L (Topic: Decolonization of British Empire), 350L (Topic 69), Liberal Arts Honors 350 (Topic: Decolonization of British Empire), 350 (Topic 8).

**Topic 9: Getting it in Writing.** An exploration of nonfiction writing and the process of translating facts, ideas, and experiences into words. Liberal Arts Honors 350 (Topic: Getting it in Writing) and 350 (Topic 9) may not both be counted.

**Topic 10: In Search of Meaning.** Restricted to Plan I majors in the College of Liberal Arts. The concepts will include: monotheism, the nature and personality of this god, the soul, chosen people, linear time, history as divine classroom, original sin, heaven, hell, salvation, etc. Establish how and when these and a host of other features came into existence and created Judeo-Christian reality, and contrast the reality created therein with other realities--Hinduism, Buddhism, Confucianism, Islam. Only one of the following may be counted: Humanities 350 (Topic: In Search of Meaning), 350 (Topic: The Quest for Meaning), 350 (Topic 6), Liberal Arts Honors 350 (Topic: In Search of Meaning), 350 (Topic 10). Prerequisite: Upper-division standing and a University grade point average of at least 3.50.

**Topic 11: Rhetoric of Great Speeches.** Exploration of the nature and history of rhetoric and analysis of some of the great speeches of the Western tradition. Liberal Arts Honors 350 (Topic: Rhetoric of Great Speeches) and 350 (Topic 11) may not both be counted.

Topic 12: Technologies of the Book. Examines the technologies that enabled the book and explores its impact on society, with particular attention paid to the printed book that has flourished since the mid-fifteenth century. Explores the technologies of production and manufacture, and those that enabled the creation of texts by authors and their distribution and reception, and considers the future of the book in today's society. Only one of the following may be counted: Information Studies 350E (Topic: Technologies of the Book), Liberal Arts Honors 350 (Topic: Technologies of the Book), 350 (Topic 12). Topic 13: Writing Nonfiction. Restricted to Plan I majors in the College of Liberal Arts. The craft of writing profiles, narratives, and essays. Concentration on the fundamental components of nonfiction: beginnings, organization, character development, narrative flow, and conclusions. Only one of the following may be counted: Liberal Arts Honors 350 (Topic: Writing Nonfiction), 350 (Topic 13), Tutorial Course 325 (Topic: Writing Nonfiction).

**Topic 14: Money In American Politics.** Restricted to Plan I majors in the College of Liberal Arts. Explores the nature and consequences of money in American politics. Only one of the following may be counted: Government 379S (Topic: Money in Politics), Humanities 350 (Topic: Money in Politics), Liberal Arts Honors 350 (Topic: Money in Politics), 350 (Topic 14).

**Topic 15: History at Play.** Restricted to Plan I majors in the College of Liberal Arts. Explores the great religious, political, and cultural debates that occurred around two historic events: England's break with the Catholic Church in 1536 and India gaining independence from Britain in 1947. Liberal Arts Honors 350 (Topic: History at Play II) and 350 (Topic 15) may not both be counted.

**Topic 16: Psychology and Religion in Modern American Culture.** Explores the historical, religious, and psychotherapeutic manifestations of the "search for meaning" in modern American culture. Examines theology, psychological theory, literature, music, politics, and art. Only one of the following may be counted: Jewish Studies 364 (Topic: Psychology and Religion in Modern American Culture), Liberal Arts Honors 350 (Topic: Psychology and Religion in Modern American Culture), and 350 (Topic 16).

**Topic 17: Race and Medicine in American Life.** Restricted to Plan I majors in the College of Liberal Arts. Only one of the following may be counted: Liberal Arts Honors 350 (Topic: Race and Medicine in American Life), 350 (Topic 17), Tutorial Course 357 (Topic: Race and Medicine in Amer Life).

**Topic 18: The Johnson Years.** Only one of the following may be counted: Government 379S (Topic: The Johnson Years), Humanities 350 (Topic: Johnson Years), Liberal Arts Honors 350 (Topic: The Johnson Years), 350 (Topic 18).

**Topic 20: Archival Fictions.** Explores the value of contemporary fiction, broadly understood to include multi-genre writing, that draws on archival materials as a means of documenting and producing counterhistories. Literary texts address global and transnational histories of colonialism, slavery, diaspora, and gender and sexual politics, as well as more specific events such as the Holocaust, 9/11, and environmental change. Only one of the following may be counted: English 360S (Topic: Historical Fictions), 360S (Topic 7), Liberal Arts Honors 350 (Topic: Historical Fictions), 350 (Topic 20).

#### LAH 358Q. Supervised Research.

Individual instruction. May be repeated for credit, but no more than six semester hours may be counted toward College Honors. Prerequisite: A University grade point average of at least 3.50 and consent of the liberal arts honors program adviser.

### LAH 364H. The Enlightenment.

Restricted to Plan I majors in the College of Liberal Arts. Examination of the European Enlightenment, an intellectual movement centered in eighteenth-century France and England that cut across all disciplines and arts and that looked back to the Renaissance and forward to the modern world. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upper-division standing and a grade point average of at least 3.50.

### LAH 365P. Honors Seminar in Political Theory.

Restricted to Plan I majors in the College of Liberal Arts. An in-depth study of selected texts, authors, or themes in the history of political thought from ancient times to the present. Three lecture hours a week for one semester. Prerequisite: Upper-division standing; six hours of any the following: Core Texts and Ideas 302, 303, Government 312P, 335M, 351C, 351D, 351E, 351G, 351J, 351L, 379S (Topic 3), 379S (Topic 4); a grade point average of at least 3.5.

### LAH 368H. Literature of the Hispanic World.

Restricted to Plan I majors in the College of Liberal Arts. An examination of the literature and culture of Spain and Spanish America, from the Middle Ages to the present. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upper-division standing and a grade point average of at least 3.50.

#### LAH 369H. Comparative Legal Systems.

Restricted to Plan I majors in the College of Liberal Arts. A comparison of legal traditions from Europe, English common law, and Asia. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upper-division standing and a grade point average of at least 3.50.

#### LAH 370H. The Birth of the Modern World, 1400-1700.

Restricted to Plan I majors in the College of Liberal Arts. An interdisciplinary course on European culture during the age of the

Renaissance and Reformation. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upperdivision standing and a grade point average of at least 3.50.

### LAH 371H. Classics of Greek Philosophy.

Restricted to Plan I majors in the College of Liberal Arts. A close reading of major works in the philosophy of Plato and Aristotle, supported by background reading in the history and literature of ancient Greece. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upper-division standing and a grade point average of at least 3.50.

### LAH 373H. Literature of the Western World: Continuities.

Restricted to Plan I majors in the College of Liberal Arts. Tradition and innovation of form and thought in literature from Homer to the twentieth century. Three lecture hours and one discussion hour a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upperdivision standing and a grade point average of at least 3.50.

### LAH 376H. The Rise of Modern America.

Restricted to Plan I majors in the College of Liberal Arts. The end of Reconstruction (1877) to the end of the war in Vietnam (1975)-industrialization, urbanization, immigration, nuclear energy, and global reach. Three lecture hours a week for one semester. Offered on the lettergrade basis only. Prerequisite: Upper-division standing and a grade point average of at least 3.50.

### LAH 377H. Ideas of the Twentieth Century.

Restricted to Plan I majors in the College of Liberal Arts. Central philosophical controversies of the twentieth century: ethics, politics, comparative religions, science and human nature. Three lecture hours and one discussion hour a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upper-division standing and a grade point average of at least 3.50.

### LAH 378H. The Natural Sciences in the Liberal Arts Context.

Restricted to Plan I majors in the College of Liberal Arts. An attempt to understand contemporary developments in science by focusing on the history and philosophy of science. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upperdivision standing and a grade point average of at least 3.50.

### LAH 379H. Classical Asian Civilizations.

Restricted to Plan I majors in the College of Liberal Arts. An examination of the contributions of India and China to intellectual history. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upper-division standing and a grade point average of at least 3.50.

### LAH 679T. Honors Thesis.

Restricted to Plan I majors in the College of Liberal Arts. Supervised research, reading, and writing of a substantial paper on an interdepartmental subject. Conference course for two semesters. Offered on the letter-grade basis only. Prerequisite: For Liberal Arts Honors 679TA, upper-division standing, a grade point average of at least 3.50, and written consent of the director of the Liberal Arts Honors Program; for 679TB, Liberal Arts Honors 679TA.

# Department of African and African Diaspora Studies

### African and African Diaspora Studies: AFR

### **Lower-Division Courses**

### AFR 301. African American Culture.

Survey of African American culture in the United States from the 1600s to the present. Subjects include the circumstances and responses of blacks during North American enslavement, the Civil War, Reconstruction, the Great Migration, the Harlem Renaissance, the civil rights movement, and contemporary contexts. Three lecture hours a week for one semester.

### AFR 302M. Numbering Race.

Subjects include conceptualization and operationalization in quantitative measurement, the calculation and interpretation of descriptive statistics and statistical relationships, the application of statistical techniques to understand social phenomenon, and techniques for presenting results from quantitative analysis. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 302M, 317D (Topic: Numbering Race), Statistics and Data Sciences 310T (Topic: Numbering Race).

### AFR 303. Introduction to Black Studies.

Same as Anthropology 310D. Introduction to canonical black studies literature, themes, and theories. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 303, Anthropology 310D, 310L (Topic: Intro to African and African Diaspora Studies).

### AFR 304. Introduction to the Study of Africa.

Examines the complex histories, intellectual entanglements, and enduring hierarchies of Africa and African studies. Explores the evolution of African studies (both intellectually and institutionally), particularly in regards to the emergence of black studies. Three lecture hours a week for one semester. African and African Diaspora Studies 304 and 317C (Topic: Introduction to the Study of Africa) may not both be counted.

### AFR 310K. Introduction to Modern Africa.

Same as History 310. Introduction to modern Africa, with focus on colonial and postcolonial development in political organization, economics, sociolinguistics, and literature. Three lecture hours a week for one semester.

### AFR 310L. Introduction to Traditional Africa.

Same as History 311K. Introductory, interdisciplinary course on the peoples and cultures of Africa. Three lecture hours a week for one semester.

### AFR 311C. Performance, Feminism, and Social Change.

Same as Women's and Gender Studies 301 (Topic 14). Exploration of the ways that engaged performance and feminist practice generate space for social change, including the basic principle that social transformation requires individual awareness, and that awareness necessitates a rigorous examination of race, gender, class, and sexuality. Only one of the following may be counted: African and African Diaspora Studies 311C, 317F (Topic: Performance, Feminism, and Social Change), Women's and Gender Studies 301 (Topic: Performance, Feminism, and Social Change), 301 (Topic 14).

### AFR 315M. Students of Color Leadership Issues.

Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 315M, 348C, 374D

(Topic: Minority Student Leadership Issues), Educational Psychology 354M, 369K (Topic: Minority Student Leadership Issues), 369K (Topic 6).

### AFR 317C. Special Topics in African Studies.

Three lecture hours a week for one semester, with one laboratory hour a week if required by the topic. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: The United States and Africa.** Same as History 317L (Topic 7). History of political, economic, and cultural relations between the United States and Africa from the early origins of the slave trade to the present. Only one of the following may be counted: African and African Diaspora Studies 317 (Topic: United States and Africa), 317C (Topic 1), History 317L (Topic 7).

**Topic 2: Yoruba Women.** Same as Women's and Gender Studies 301 (Topic 15). Examination of gender construction in Yorubaland, including an exploration of the difference between Western gender construction and African notions of gender through analyses of the religious, linguistic, cultural, and sociopolitical aspects of Yoruba life. Only one of the following may be counted: African and African Diaspora Studies 317C (Topic: Yoruba Women), 317C (Topic 2), Women's and Gender Studies 301 (Topic: Yoruba Women), 301 (Topic 15).

**Topic 3: Peoples and Cultures of Africa.** Exploration of indigenous and contemporary societies of Africa south of the Sahara, designed to provide students with an understanding of the diversity of the societies and cultures of Africa. Focuses on the precolonial, colonial, and postcolonial historical, political, economic, and sociocultural issues that have determined and shaped the lives of the people. African and African Diaspora Studies 317C (Topic: Peoples and Cultures of Africa) and 317C (Topic 3) may not both be counted. **Topic 4: The Civilizations of Africa to 1800.** Same as History 317N (Topic 3). Introductory course exposes students to ancient Africa, its peoples, cultures, and landscapes. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 317C (Topic: Civilizations of Africa to 1800), 317C (Topic 4), History 317N (Topic: Civilizations of Africa to 1800), 317N (Topic 3).

**Topic 5: Introduction to Ancient Egypt.** Same as Classical Civilization 304C (Topic 3). A survey of the language, culture, and history of Egypt from the prehistorical period (13,000 BC) to the New Kingdom (1069 BC). Only one of the following may be counted: African and African Diaspora Studies 317C (Topic: Introduction to Ancient Egypt), 317C (Topic 5), Classical Civilization 304C (Topic 3), 348 (Topic 11).

### AFR 317D. Special Topics in Black United States Studies.

Three lecture hours or two lecture hours and one discussion hour a week for one semester, with one additional laboratory hour a week if required by the topic. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Introduction to African American History.** Same as History 317L (Topic 3). Only one of the following may be counted: African and African Diaspora Studies 317 (Topic: Introduction to African American History), 317D (Topic 1), History 317L (Topic 3).

**Topic 2: Anthropology of Race and Ethnicity: An Introduction.** Same as American Studies 315D and Anthropology 310L (Topic 2: Anthropology of Race and Ethnicity: An Introduction). Examines the social importance of race and ethnicity both in America and around the world. Only one of the following may be counted: African and African Diaspora Studies 317D (Topic 2) and American Studies 315 (Topic: Anthropology of Race and Ethnicity), 315D, Anthropology 310L (Topic 2).

**Topic 3: The Black Power Movement.** Same as History 317L (Topic 9). Examines the major organizations, key figures, and ideologies of the Black Power movement from the late 1960s and early 1970s. Only one

of the following may be counted: African and African Diaspora Studies 317D (Topic: Black Power Movement), 317D (Topic 3), History 317L (Topic: Black Power Movement), 317L (Topic 9).

Topic 4: The Politics of Black Identity. Analysis of the idea that the activities and practices of certain black celebrities, leaders, and intellectuals whose attitudes, behavior, and politics differ from the black majority undermine black progress. Examines the history of labels that make reference to black identity, including "Uncle Tom," "Negro," "sellout," and various other denigrating names. African and African Diaspora Studies 317D (Topic 4) and 317F (Topic: The Politics of Black Identity) may not both be counted.

**Topic 5: Introduction to Black Women's Studies.** Same as Women's and Gender Studies 301 (Topic 16). Interdisciplinary examination of the complexities of black womanhood in America through an investigation of history, identity, popular culture, and black feminism/ womanism, as well as social and political activism. Only one of the following can be counted: African and African Diaspora Studies 317D (Topic: Introduction to Black Women's Studies), 317D (Topic 5), Women's and Gender Studies 301 (Topic: Introduction to Black Women's Studies), 301 (Topic 16).

**Topic 6: Dr. Martin Luther King, Jr. A Moral Obligation.** Explores the Civil Rights Movement focusing on the specific work of Dr. Martin Luther King, Jr. The history of the MLK statue on the UT-Austin campus will be the main focus of the course. Three lecture hours a week for one semester. African and African Diaspora Studies 317D (Topic: MLK Jr. A Moral Obligation) and 317D (Topic 6) may not both be counted.

**Topic 7: Community Policing in the United States.** Explores the history of policing in the United States by examining the beginning of American policing including a focus on community policing. Three lecture hours a week for one semester. African and African Diaspora Studies 317D (Topic 7) and 372F (Topic: No Matter What: Policing/Us) may not both be counted.

**Topic 8: UT Black Student Activism.** Explores Black Student Activism focusing on the history of student activism on the University of Texas at Austin campus. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 317D (Topic 8), 374D (Topic: Black Lives Matter Movement), Educational Psychology 369K (Topic: Black Lives Matter Movement).

### AFR 317E. Special Topics in the African Diaspora.

Three lecture hours a week for one semester, with one laboratory hour a week if required by the topic. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 1: Black Queer Art Worlds. Same as Anthropology 310L (Topic 6) and Women's and Gender Studies 301 (Topic 17). Exploration of over two decades of work produced by and about black queer subjects throughout the circum-Atlantic world. Provides an introduction to various artists and intellectuals of the black queer diaspora, as well as an examination of the viability of black queer aesthetic practice as a form of theorizing. Only one of the following may be counted: African and African Diaspora Studies 317E (Topic: Black Queer Diaspora Aesthetics), 317E (Topic 1), Anthropology 310L (Topic: Black Queer Diaspora Aesthetics), 310L (Topic 6), Women's and Gender Studies 301 (Topic: Black Queer Diaspora Aesthetics), 301 (Topic 17). Topic 2: Diaspora: Race, Nation, and Resistance. Same as Anthropology 310L (Topic 7). Subjects include makings and meanings of diaspora, the differences and similarities between diaspora and related concepts such as race, nation, and cultural identity. Focuses on the making of the black Atlantic world, and comparative analysis between black diasporic life and that of other global dispersals, particularly among Asian and indigenous populations, and how resistance serves as a key link. Only one of the following may be counted: African and African Diaspora Studies 317E (Topic: Diaspora:

Race/Nation/Resistance), 317E (Topic 2), Anthropology 310L (Topic: Diaspora: Race/Nation/Resistance), 310L (Topic 7), Asian American Studies 310 (Topic: Diaspora: Race/Nation/Resistance). **Topic 3: Liberation in the African Diaspora**. Same as Latin American Studies 310 (Topic 7). Examination of liberation and freedom struggles in the African diaspora, focusing on common intellectual, political, and social currents among the diaspora's various groups. Course focuses on three major themes: abolitionism, Pan-Africanism and national liberation, and hip hop. Particular emphasis will be on the ideas associated with these movements, and the major organizations and intellectual currents in all three. Only one of the following may be counted: African and African Diaspora Studies 317E (Topic: Liberation in the African Diaspora), 317E (Topic 3), Latin American Studies 310 (Topic: Liberation in the African Diaspora), 310 (Topic 7).

### AFR 317F. Special Topics in Black Expressive Culture.

Three lecture hours a week for one semester, with one laboratory hour a week if required by the topic. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: African American Literature and Culture.** Same as English 314V (Topic 1: African American Literature and Culture). Explores texts, drawn from a variety of genres and periods, that indicate the range of African American experiences and how those experiences are influenced by issues such as class, ethnicity, gender, sexuality, and race. African and African Diaspora Studies 317F (Topic 1) and English 314V (Topic 1) may not both be counted.

**Topic 2: Music of African Americans.** Same as Music 307 (Topic 1). Introduction to the variety of modes of expression of African American culture in music and other related genres. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 317 (Topic 2: Music of African Americans), 317F (Topic 2), Music 307 (Topic 1).

### AFR 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in African and African Diaspora Studies.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Center for African and African Diaspora Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

### AFR 321. The African Diaspora in the Americas.

Same as Anthropology 324L (Topic 9: The African Diaspora in the Americas). Black cultures and societies in the New World, and their African heritage. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

### AFR 321K. African American Family.

Same as Social Work 360K (Topic 2) and Women's and Gender Studies 340 (Topic 3). Overview of historical and contemporary issues facing African American families and children. Social service delivery to African American families and communities is emphasized. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 321K, 374 (Topic 1), Social Work 360K (Topic 2), Women's and Gender Studies 340 (Topic 3).

### AFR 321L. Sociology of Education.

Same as Sociology 321L and Women's and Gender Studies 345 (Topic 23: Sociology of Education). Education as a societal institution, with emphasis on the United States educational system: how the system

works; the effects of the system; recent changes. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

### AFR 322. Introduction to African Prehistory.

Same as Anthropology 324L (Topic 7: Introduction to African Prehistory). Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

### AFR 322D. Race and the Digital.

Same as Sociology 322D and Women's and Gender Studies 322 (Topic 7). Review of theoretical developments in the sociological study of "race," including an examination of processes of racialization and cultural texts, in order to better understand the ways in which identities are socially produced. Attention will be placed on forms of popular culture, black cultural production, and political action to question how such practices are shaped by migrations within the African diaspora. Only one of the following may be counted: African and African Diaspora Studies 322D, 374E (Topic: Race, Culture, and Migration), Sociology 321K (Topic: Race, Culture, and Migration), 322 (Topic 7). Prerequisite: Upper-division standing.

### AFR 324E. Racism and Antiracism.

Same as Asian American Studies 330 (Topic 2). Examines the theories and definitions of racism across several fields: anthropology, sociology, psychology, cultural studies, postcolonial studies, and gender/sexuality studies. Also includes a section that focuses on anti-racist activism, particularly within people of color and immigrant communities. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 324E, 374D (Topic: Racism and Antiracism), 374D (Topic 10), Anthropology 324L (Topic: Racism and Antiracism), Asian American Studies 330 (Topic: Racism and Antiracism), 330 (Topic 2). Prerequisite: Upper-division standing.

## AFR 326. Afro-Caribbean Politics and Culture in Central America.

Same as Anthropology 324L (Topic 47), Latin American Studies 337N, and Women's and Gender Studies 340 (Topic 38). Exploration of black identity, political systems, and community activism in Central America and the Caribbean. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 326, 374E (Topic: Afro-Caribbean Politics and Culture in Central America), Anthropology 324L (Topic: Afro-Caribbean Politics and Culture in Central America), 324L (Topic: 47), Government 365N (Topic: Afro-Caribbean Politics and Culture in Central Studies 337M (Topic: Afro-Caribbean Politics and Culture in Central America), 337N, Women's and Gender Studies 340 (Topic: Afro-Caribbean Politics and Culture in Central America), 340 (Topic 38). Prerequisite: Upper-division standing.

### AFR 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in African and African Diaspora Studies.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Center for African and African Diaspora Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### AFR 345. History of East Africa.

Same as History 359P. A survey of the history of Kenya, Tanzania, and Uganda from prehistoric times to the postindependence era. Three

lecture hours a week for one semester. Prerequisite: Upper-division standing.

### AFR 345C. History of West Africa.

Same as History 359R. A history of the West Africa region: the rise and fall of kingdoms, relations with Europe and Asia, the great revolutions of the nineteenth century, colonial administration, decolonization, and the search for economic development and political stability since independence. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

### AFR 350. Measuring Racial Inequality.

Same as Latin American Studies 322 (Topic 21). Analysis of racial inequality through social statistics. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 350, 372F (Topic: Measuring Racial Inequality), Latin American Studies 322 (Topic: Measuring Racial Inequality), 322 (Topic 21). Prerequisite: Upper-division standing.

## AFR 356C. African American Theatre History: Precolonial West African Performance to 1950.

Chronological examination of the theatrical work of Africans and African Americans from precolonial West Africa to the United States in 1950. Subjects include productions, performance theory, play texts, essays, reviews, and manifestos within their sociopolitical contexts, with an emphasis on strategies of resistance that are embedded in aesthetics. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 356C, 374F (Topic: African-American Theatre History, Precolonial-1950), Theatre and Dance 357T (Topic: African-American Theatre History, Precolonial-1950). Prerequisite: Upper-division standing.

## AFR 356D. African American Theatre History: 1950 to Present.

Chronological examination of the history of African American theatre since 1950, through the study of productions, performance theory, play texts, essays, reviews, and manifestos within their sociopolitical contexts, with an emphasis on strategies of resistance that are embedded in aesthetics. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 356D, 374F (Topic: African American Theatre History, 1950-Present), Theatre and Dance 357T (Topic: African American Theatre History, 1950-Present). Prerequisite: Upper-division standing.

### AFR 356E. Black Women and Dance.

Same as Women's and Gender Studies 340 (Topic 43). Exploration of how black women express creativity in response to the violence of racism and sexism, and to envision new ways of being and moving in the world. Women's participation in ritual, concert, and social dance in North America, Haiti, Cuba, and Brazil will be studied through readings, viewings, and stagings. Only one of the following may be counted: African and African Diaspora Studies 356E, 372E (Topic: Black Women and Dance), Theatre and Dance 357T (Topic: Black Women and Dance), Women's and Gender Studies 340 (Topic: Black Women and Dance), 340 (Topic 43). Prerequisite: Upper-division standing.

### AFR 357C. African American History to 1860.

Same as American Studies 321E and History 357C. Review of West African origins; New World settlement patterns, social life, and culture; discussion of the Atlantic slave trade, the development of capitalism and plantation slavery, and the origins of racism. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 357C, American Studies 321 (Topic: African American History to 1860), 321E, History 357C. Prerequisite: Upperdivision standing.

### AFR 357D. African American History since 1860.

Same as American Studies 321F, History 357D, and Urban Studies 353 (Topic 1). Survey of the history of African Americans in the United States from 1860 to the present: Emancipation, Reconstruction politics, migration and urbanization, and the evolution of African American culture; kinds of sources and methods valuable for analyzing African American life and culture. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 357D, American Studies 321 (Topic: African American History since 1860), 321F, History 357D, Urban Studies 353 (Topic 1). Prerequisite: Upper-division standing.

### AFR 359N. History of Africa since 1800.

Same as History 359N. Development of sub-Saharan Africa from the end of the slave trade to independence. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

### AFR 360. Race, Law, and United States Society.

Same as American Studies 370 (Topic 5) and History 365G (Topic 13). Examines the intersection of racial ideology and legal culture in the United States. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 360, 372F (Topic: Race, Law, and US Society), American Studies 370 (Topic: Race, Law, and US Society), 370 (Topic 5), History 365G (Topic: Race, Law, and US Society), 365G (Topic 13). Prerequisite: Upper-division standing.

## AFR 361K. Performing Race: African American Literary Performance.

Study of the criticism and performance of modern African American drama. Three lecture hours a week for one semester. African and African Diaspora Studies 361K and 374 (Topic: Performance of Dramatic Literature: African American Writers) may not both be counted. Prerequisite: Upper-division standing.

### AFR 365. Politics in Contemporary Africa.

Same as Government 365N (Topic 1: Politics in Contemporary Africa). Prerequisite: Six semester hours of lower-division coursework in government.

### AFR 372C. Topics in Critical Black Studies.

Explores the history, foundational ideas, and subsequent theoretical developments that guide contemporary black studies. Three lecture hours a week for one semester. Only one of the following may be counted unless the topics vary: African and African Diaspora Studies 372C, 374, 374C, 374D, 374E, 374F. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites vary with the topic.

**Topic 2: Race and Beauty in American Culture**. Same as History 350R (Topic 11). African and African Diaspora Studies 372C (Topic 2) and History 350R (Topic 11) may not both be counted.

**Topic 3: Property in American Culture.** Same as American Studies 370 (Topic 38: Property in American Culture). Explores American conceptions of property over a wide range of economic transformations from the mercantile to the digital age, with special attention to the ambiguous and tension-filled meanings of property for women, African Americans, and Native Americans. Only one of the following may be counted: African and African Diaspora Studies 372C (Topic 3), 374D (Topic: Property in American Culture), American Studies 370 (Topic: Property in American Culture), 370 (Topic 38). **Topic 4: Gender and Slavery in the United States.** Same as History 350R (Topic 14) and Women's and Gender Studies 345 (Topic 31). Examines the gendered experience of chattel slavery in the United States. Includes critical analysis of classic and contemporary texts, films, and songs that focus on slave labor, family, community, sexuality, and the economy. Only one of the following may be counted: African and African Diaspora Studies 372C (Topic 4), 374D (Topic: Gender and Slavery in the United States), History 350L (Topic: Gender and Slavery in the United States), 350R (Topic 14), Women's and Gender Studies 340 (Topic: Gender and Slavery in the United States), 345 (Topic 31).

Topic 5: Social Media for Social Impact. Explores the social media universe through the lens of black studies. In addition to considering traditional black studies issues as they play out in the social media context, students will also engage professional development activities and service learning. Through activities, discussions, and readings, students will study black participation in the social media landscape, and will experience the possibilities for social media participation as a community benefit. African and African Diaspora Studies 372C (Topic: Black Studies & Social Media) and 372C (Topic 5) may not both be counted. Additional prerequisite: Upper-division standing. Topic 6: The United States and Third World Feminisms. Same as Government 335M (Topic 16). Explores the variety of feminisms developed by women of color and non-western women to critique the racism and ethnocentrism of white-dominated systems and practices, including feminism. Only one of the following may be counted: African and African Diaspora Studies 372C (Topic: The US and Third World Feminisms), 372C (Topic 6), 374 (Topic: The US and Third World Feminisms), Government 335M (Topic: The US and Third World Feminisms), 335M (Topic 16), Women's and Gender Studies 340 (Topic: The US and Third World Feminisms).

**Topic 7: Women and Social Movements in the Twentieth-Century United States.** Same as American Studies 321 (Topic 10), History 365G (Topic 8), and Women's and Gender Studies 340 (Topic 53). Examines women's participation in well-known and lesser-known social movements during the twentieth century. Only one of the following may be counted: African and African Diaspora Studies 372C (Topic: Women and Socl Mvmnts in US), 372C (Topic 7), American Studies 321 (Topic: Women/Social Movements in US), 321 (Topic 10), History 365G (Topic: Women/Social Movements in US), 365G (Topic 8), Women's and Gender Studies 340 (Topic: Women/Socl Movements in the US, 340 (Topic 53).

**Topic 8: Anthropology for Liberation**. Same as Anthropology 324L (Topic 65). Takes a critical look at anthropologists' quests to shifting the legacy of anthropology from the colonial toward freedom and liberation. Explores anthropology's relationship to human rights, violence, questions of race, gender, and sexuality, imperialism and neoliberalism, and the ways that some anthropologists have chosen to use their field work in new and different ways. Only one of the following may be counted: African and African Diaspora Studies 372C (Topic: Anthropology for Liberation), 372C (Topic 8), Anthropology 324L (Topic: Anthropology for Liberation), 324L (Topic 65), Women's and Gender Studies 340 (Topic: Anthropology for Liberation). Additional prerequisite: Upper-division standing.

**Topic 12: Race, Gender, and Surveillance.** Same as American Studies 321 (Topic 6), Sociology 322V, and Women's and Gender Studies 322 (Topic 8). Overview of theories in the sociology of social control, with a focus on risk, power, ethics, and surveillance. Examines historical transformations in social control and the distributions of power in the United States and global contexts, with attention to race, gender, and class. Subjects include: the transatlantic slave trade; prisons and punishment; the gaze, voyeurism, and reality television watching; the Internet; travel and state borders; privacy; and biometrics and the body. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 372C

(Topic 12), 374E (Topic: Surveillance and Social Control), American Studies 321 (Topic 6), Sociology 321K (Topic: Surveillance and Social Control), 322V, Women's and Gender Studies 322 (Topic: Surveillance and Social Control), 322 (Topic 8). Additional prerequisite: Upperdivision standing.

**Topic 14: Black Political Thought.** Same as American Studies 370 (Topic 42). Exploration of black social and political thinkers, writers, and reformers, and how their works influence the legacies of slavery, empire, and patriarchy within the United States. Only one of the following may be counted: African and African Diaspora Studies 372C (Topic: Black Political Thought), 372C (Topic 14), American Studies 370 (Topic: Black Political Thought), 370 (Topic 42).

**Topic 15: Postcolonial Women Writers.** Same as Comparative Literature 323 (Topic 38) and Women's and Gender Studies 340 (Topic 64). Literary exploration of how postcolonial women across the world view their positions as citizens, migrants, workers, parents, activists, and artists in the new millennium. Subjects include the effects of imperialism in women's lives, western feminisms developed to address global women's needs, and what new possibilities for decolonization, feminism, and creativity remain to be explored. Only one of the following may be counted: African and African Diaspora Studies 372C (Topic: Postcolonial Women Writers), 372C (Topic 15), Comparative Literature 323 (Topic: Postcolonial Women Writers), 323 (Topic 38), English 370W (Topic: Postcolonial Women Writers), Women's and Gender Studies 340 (Topic: Postcolonial Women Writers), 340 (Topic 64).

## AFR 372D. Topics in Black Education, Psychology, and Health.

Explores the history, theoretical developments, and institutional forms that impact the education and the physical, mental, and emotional health and well-being of people of African descent. Three lecture hours a week for one semester. Only one of the following may be counted unless the topics vary: African and African Diaspora Studies 372D, 374, 374C, 374D, 374E, 374F. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites vary with the topic.

**Topic 1: Psychology of Race and Racism**. Same as Educational Psychology 354J. Review of the history and evolution of the construct of race as a psychological and social phenomenon. Multidisciplinary but primarily social-psychological approach: in addition to readings from psychology, ideas in the areas of anthropology, sociology, and biology will be discussed. Emphasis on theoretical and conceptual approaches toward understanding the psychology of racial thinking. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 372D (Topic 1), 374D (Topic: Psychology of Race and Racism), Educational Psychology 354J, 362 (Topic 6: Psychology of Race and Racism), 362 (Topic: Psychology of Race and Racism). Additional prerequisite: Upper-division standing.

**Topic 2: Sociocultural Influences on Learning.** Human learning in multisocial, multilingual, and multicultural contexts; realities of society and their impact on learning; social concerns such as prejudice, stereotyping, cross-cultural attitudes, bilingual issues, parent and community involvement. Three lecture hours a week for one semester, with field hours to be arranged. Only one of the following may be counted: African and African Diaspora Studies 372D (Topic 2), 374D (Topic: Sociocultural Influences on Learning), Applied Learning and Development 327. Additional prerequisite: Three semester hours of coursework in psychology.

### AFR 372E. Topics in Black Popular Culture.

Studies in music, art, literature, and sports that explore the artistic, aesthetic, bodily, and other cultural expressions and traditions of black people. Three lecture hours a week for one semester; additional hours required for some topics. Only one of the following may be counted unless the topics vary: African and African Diaspora Studies 372E, 374, 374C, 374D, 374E, 374F. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites vary with the topic.

**Topic 1: Toni Morrison.** Same as English 349S (Topic 5) and Women's and Gender Studies 345 (Topic 46). An examination of select novels by the Nobel Laureate and Pulitzer Prize-winning novelist focuses on the positional uniqueness that womanism shares with a predominant feminism, which surfaces in historicized familial relationships. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Toni Morrison), 372E (Topic 1), English 349S (Topic 5), Women's and Gender Studies 340 (Topic: Toni Morrison), 345 (Topic 46). Additional prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

**Topic 2: Slavery across Genres.** Same as American Studies 370 (Topic 32). Uses nonfictional and fictional narrative accounts of slavery in the United States to examine the political, social, cultural, economic, and psychological aspects of the institution of slavery at different historical moments. Sources may include authors such as Frederick Douglass, Toni Morrison, William Faulkner, Harriet Beecher Stowe, and Edward P. Jones; graphic novels; conceptual art; court records; and bills of sale. Only one of the following may be counted: African and African Diaspora Studies 372E (Topic 2), American Studies 370 (Topic: Slavery across Genres), 370 (Topic 32).

**Topic 4: African American Literature through the Harlem Renaissance.** Same as English 376R. A survey of African American writing, including autobiography, poetry, fiction, and drama. Authors may include Douglass, Jacobs, Frances E. W. Harper, Chestnutt, Du Bois, Hurston, and Hughes. Three lecture hours a week for one semester. African and African Diaspora Studies 372E (Topic 4) and English 376R may not both be counted. Additional prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

Topic 5: African American Literature since the Harlem Renaissance. Same as English 376S. The development of African American poetry, drama, fiction, and nonfiction since the Harlem Renaissance. Authors may include Wright, Ellison, Baldwin, Malcolm X, Baraka, Morrison, Shange, and Charles Johnson. Three lecture hours a week for one semester. African and African Diaspora Studies 372E (Topic 5) and English 376S may not both be counted. Additional prerequisite: Nine semester hours of coursework in English or rhetoric and writing. Topic 8: Self-Revelation in Women's Writing. Same as Comparative Literature 323 (Topic 4), Middle Eastern Studies 342 (Topic 19), and Women's and Gender Studies 340 (Topic 14). Only one of the following may be counted: African and African Diaspora Studies 372E (Topic 8), 374 (Topic 26), Comparative Literature 323 (Topic 4), English 322 (Topic: Self-Revelation in Women's Writing), Middle Eastern Studies 342 (Topic 19), Women's and Gender Studies 340 (Topic 14). Topic 12: Black Perspectives in Jazz. Same as Music 342 (Topic 5). Explores the social, cultural, political, and artistic relationships between jazz and the black experience, both within the African American context and throughout the diaspora. Only one of the following may be counted: African and African Diaspora Studies 372E (Topic 12), 374 (Topic 10: Black Perspectives in Jazz), Music 342 (Topic 5).

**Topic 13: Black Queer Literature and Film.** Same as English 376M (Topic 8) and Women's and Gender Studies 340 (Topic 47). Analyzes written works, films, and videos by and about lesbians, bisexual, transgender, and gay black people, with an emphasis on understanding the historical and theoretical construction of sexual and gender identities and sexual/cultural practices in black communities. Only one of the following may be counted: African and African Diaspora Studies 372E (Topic: Black Queer Literature and Film), 372E (Topic 13), 374F (Topic: Black Queer Literature and Film),

English 376M (Topic: Black Queer Literature and Film), 376M (Topic 8), Women's and Gender Studies 340 (Topic: Black Queer Literature and Film), 340 (Topic 47). Additional prerequisite: For English majors, nine semester hours of coursework in English or rhetoric and writing; for others, upper-division standing.

Topic 15: Contemporary African American Women's Fiction. Same as English 376M (Topic 7) and Women's and Gender Studies 340 (Topic 29). Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Contemporary African American Women's Fiction), 372E (Topic 15), English 376M (Topic: Contemporary African American Women's Fiction), 376M (Topic 7). Women's and Gender Studies 340 (Topic: Contemporary African American Women's Fiction), 340 (Topic 29). Additional prerequisite: Nine semester hours of coursework in English or rhetoric and writing. Topic 17: Hip Hop Rhetorics. Same as Women's and Gender Studies 335 (Topic 8). Examination of the hip hop rhetorics of writers, performers, and activists of the hip hop generation. Subjects include the use of cultural tools including rap, fashion, dance, graffiti, and deejaying, to construct their identities and make and disseminate meaning within and about their social worlds, particularly around issues of racism, sexism and misogyny, poverty, and heterosexism. Only one of the following may be counted: African and African Diaspora Studies 372E (Topic: Hip Hop Rhetorics), 372E (Topic 17), Women's and Gender Studies 335 (Topic 8).

**Topic 18: Kinetic Storytelling.** Exploration of the use of dance as a practice of social justice. Kinetic storytelling is a dance-based theatre that is highly structured yet improvisational and is explicitly informed by Africanist aesthetics and concerns of marginalization and inequity. Only one of the following may be counted: African and African Diaspora Studies 372E (Topic: Kinetic Storytelling), 372E (Topic 18), Theatre and Dance 352T (Topic: Kinetic Storytelling). Additional prerequisite: Consent of instructor.

**Topic 19: Race and Sport in African American Life.** Same as Anthropology 324L (Topic 26) and Kinesiology 352K (Topic 6). Only one of the following may be counted: African and African Diaspora Studies 372E (Topic 19), 374 (Topic 27), Anthropology 324L (Topic 26), Kinesiology 352K (Topic 6) Additional prerequisite: Upper-division standing.

**Topic 20: African American Concert Dance.** Examines dance by and for African Americans and its relation to politics of race, gender, sexuality, class, and power in relation to evolving social and historical contexts. Explores the ways the concept of "blackness" has been embodied, challenged, and intersected with the development of evolution of American concert dance since the turn of the twentieth century. Only one of the following may be counted: African and African Diaspora Studies 372E (Topic: African American Concert Dance), 372E (Topic 20), Theatre and Dance 352T (Topic: African American Concert Dance).

### AFR 372F. Topics in Blacks in Government, Law, and Policy.

Explores the philosophical, legal, and institutional traditions affecting black people as individual members of a group and participants in broader societies. Three lecture hours a week for one semester. Only one of the following may be counted unless the topics vary: African and African Diaspora Studies 320, 372F, 374, 374C, 374D, 374E. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites vary with the topic.

**Topic 1: Geographies of International Development in Africa.** Same as Geography 330F. Critically examines the major approaches to "Development" in colonial and postcolonial eras, with a focus on a range of African resources: from water to wildlife, forests to farms, airways to rangelands, and including a consideration of African bodies themselves as sites of development and resistance. Only one of the following may be counted: African and African Diaspora Studies 372F

(Topic: INTL DEVELOPMENT IN AFRICA), 372F (Topic 1), Geography 330F, 356T (Topic: INTL DEVELOPMENT IN AFRICA), 356T (Topic 10). Additional prerequisite: Upper-division standing.

Topic 10: Race and the Criminal Justice System. Same as Anthropology 324L (Topic 38). Examines historical and contemporary studies that provide arguments about the connections between race, poverty, and the criminal justice system. Subjects include how and why acts of police violence, questionable court proceedings, and unjust sentences routinely take place, and how and why they are often sanctioned by institutional practices and society at large. Only one of the following may be counted: African and African Diaspora Studies 320 (Topic 3), 372F (Topic 10), Anthropology 324L (Topic 38). Topic 12: Black Women and the State. Same as Anthropology 324L (Topic 78), Latin American Studies 324L (Topic 17), and Women's and Gender Studies 340 (Topic 7). Surveys black women's experiences living with and confronting state oppression around the world. Takes an historical, social, and theoretical look at the roots of this oppression and inequality, and how black women have chosen to respond to it locally and globally. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 372F (Topic: Black Women, Struggle, and the Transnational State), 372F (Topic 11), 372F (Topic 12), Anthropology 324L (Topic: Black Women, Struggle, and the Transnational State), 324L (Topic 78), Latin American Studies 324L (Topic: Black Women, Struggle, and the Transnational State), 324L (Topic 17), Women's and Gender Studies 340 (Topic: Black Women, Struggle, and the Transnational State), 340 (Topic 7), 340 (Topic 63). Additional prerequisite: Upper-division standing.

**Topic 13: Urban Unrest.** Same as Asian American Studies 330 (Topic 6), American Studies 321 (Topic 8), Anthropology 324L (Topic 46), and Urban Studies 354 (Topic 14). Analysis of the roots of urban unrest, exploring a range of origins: joblessness, state violence, white flight, backlash against civil rights gains, new immigration, and interracial strife. Beyond race and class, subjects include exploring unrest as a mode of pushing the normative boundaries of gender and sexuality in public space. Course material will draw from film, literature, history, geography, and anthropology. Only one of the following may be counted: African and African Diaspora Studies 372F (Topic: Urban Unrest), 372F (Topic 13), 374D (Topic: Urban Unrest), American Studies 321 (Topic: Urban Unrest), 321 (Topic 8), Anthropology 324L (Topic: Urban Unrest), 324L (Topic 46), Asian American Studies 330 (Topic: Urban Unrest), 330 (Topic 6), Urban Studies 354 (Topic: Urban Unrest), 354 (Topic 14).

**Topic 15: The Tragicomedy of American Democracy.** Same as American Studies 370 (Topic 44) and Core Texts and Ideas 326 (Topic 2). Examines the foundational ideas and practices essential to the unfolding of American democracy by focusing on founding documents, public speeches, major political conflicts, and canonical texts of political philosophy. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: Tragicomedy of American Democracy), 372F (Topic 15), American Studies 370 (Topic: Tragicomedy of American Democracy), 370 (Topic 44), Core Texts and Ideas 326 (Topic: Tragicomedy of American Democracy), 326 (Topic 2), Western Civilization 320 (Topic: Tragicomedy of American Democracy).

## AFR 372G. Topics in African and African Diasporic Cultures and Languages.

Explores the cultural, historical, linguistic, artistic, philosophical, and other intellectual traditions emerging from within Africa and as developed, reinterpreted, or reimagined in diasporic contexts. Three lecture hours a week for one semester; additional hours required for some topics. Only one of the following may be counted unless the topics vary: African and African Diaspora Studies 372G, 374, 374C, 374D, 374E, 374F. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites vary with the topic.

**Topic 1: Literature of AIDS in Africa.** Same as English 360S (Topic 2). Examines the emerging cultural representations of AIDS in sub-Saharan Africa through journalistic, social science, and historical accounts. Examines the difficulty of representing the various aspects of a public-health crisis. Only one of the following may be counted: African and African Diaspora Studies 372G (Topic 1), 374C (Topic: Literature of African AIDS), English 360S (Topic 2). Additional prerequisite: For English majors, nine semester hours of coursework in English or rhetoric and writing; for others, upper-division standing. **Topic 2: Nigeria: A History of Nation-Building.** Same as History 350L (Topic 35). African and African Diaspora Studies 372G (Topic 2) and History 350L (Topic 35) may not both be counted.

**Topic 3: Archaeology of African Thought.** Same as Anthropology 324L (Topic 24). Archaeological, historical, and ethnographic data as they relate to the foundations of contemporary African and African American societies. African and African Diaspora 372G (Topic 3) and Anthropology 324L (Topic 24) may not both be counted. **Topic 4: African Cinemas.** Explores the cultural and social values in historical, literary, and fictional contexts of African films.

**Topic 5: Gender in North and West Africa**. Same as Islamic Studies 373 (Topic 8), Middle Eastern Languages and Cultures 321 (Topic 16), Middle Eastern Studies 342 (Topic 28), and Women's and Gender Studies 340 (Topic 34). Examines gender discourses through North African and West African literary works by looking at the role(s) played by Islam and Christianity in the creation of the identities of African men and women. Includes discussion of the question of what gender is, and whether it is socially constructed. Only one of the following may be counted: African and African Diaspora Studies 372G (Topic 5), 374C (Topic: Gender in North and West Africa), Islamic Studies 372 (Topic: Gender in North and West Africa), 373 (Topic 8), Middle Eastern Languages and Cultures 321 (Topic 16), Middle Eastern Studies 342 (Topic 28), Women's and Gender Studies 340 (Topic: Gender in North and West Africa) studies 340 (Topic 28), 340 (Topic 34). Additional prerequisite: Upper-division standing.

**Topic 6: African Women's History.** Same as History 364G (Topic 5) and Women's and Gender Studies 340 (Topic 32). Major themes include politics, economics, religion, the family, culture, technology, feminism, colonialism, nationalism, and development in relation to the lives of African women. Only one of the followed may be counted: African and African Diaspora Studies 372G (Topic 6), 374C (Topic: African Women's History), History 364G (Topic: African Women's History), 364G (Topic 5), Women's and Gender Studies 340 (Topic: African Women's History), 340 (Topic 32).

**Topic 7: African Queer Studies.** Same as Women's and Gender Studies 335 (Topic 3). Examines the development of African queer studies as the interdisciplinary study of sexuality on the African continent, and its impact on the academic and activist realm. Focus on intersectional feminist and queer theory and how this field offers tools that can be used to rethink issues of oppression and domination in relationship to race, nation, sex, gender, and sexuality on the African continent. Of particular interest will be LGBTQ activism and the ways in which queer Africans engage and shape their sexuality, and create forms of belonging in their countries and their communities. Only one of the following may be counted: African and African Diaspora Studies 372G (Topic: African Queer Studies), 372G (Topic 7), Women's and Gender Studies 335 (Topic 3), 340 (Topic: African Queer Studies).

**Topic 8: Afro-Luso-Brazilian Worlds.** Same as Latin American Studies 328 (Topic 3) and Portuguese Civilization 320E (Topic 3). Study of the myths and realities in the Afro-Luso-Brazilian worlds and the connections and contrasts between them. Only one of the following may be counted: African and African Diaspora Studies 372E (Topic: Afro-Luso-Brazilian Worlds), 374E (Topic: Afro-Luso-Brazilian Worlds),

372G (Topic 8), Comparative Literature 323 (Topic: Afro-Luso-Brazilian Worlds), Latin American Studies 328 (Topic 3), 370P (Topic: Afro-Luso-Brazilian Worlds), Portuguese Civilization 320E (Topic: Afro-Luso-Brazilian Worlds), 320E (Topic 3).

**Topic 10: Afro-Latin America.** Same as History 350L (Topic 68) and Latin American Studies 366 (Topic 31). Examines the historical experiences of people of African descent in Latin America and the Caribbean beginning in the slavery era, and focuses on the histories of Afro-Latin Americans after emancipation. Only one of the following may be counted: African and African Diaspora Studies 372G (Topic: Afro-Latin America), 372G (Topic 10), 374E (Topic: Afro-Latin America), History 350L (Topic: Afro-Latin America), 350L (Topic 68), Latin American Studies 366 (Topic: Afro-Latin America), 366 (Topic 31). Additional prerequisite: Upper-division standing.

**Topic 20: The Histories of African Liberation.** Same as History 364G (Topic 9). Examination of important figures, movements, strategies, and factors that contributed to decolonization on the African continent. Only one of the following may be counted: African and African Diaspora Studies 372G (Topic: Histories of African Liberation), 372G (Topic 20), History 364G (Topic: Histories of African Liberation), 364G (Topic: 9).

**Topic 32: African History in Films and Photographs.** Same as History 364G (Topic 4). Designed to increase understanding of the social, economic, and political challenges of the past fifty years of Africa's history through an examination of several popular films. Only one of the following may be counted: African and African Diaspora Studies 374C (Topic: African History in Films and Photographs), 372G (Topic: African History in Films and Photographs), 372G (Topic 32), History 364G (Topic: African History in Films and Photographs), 364G (Topic 4).

**Topic 33: Sex and Power in the African Diaspora.** Same as Anthropology 324L (Topic 48) and Women's and Gender Studies 340 (Topic 52). Exploration of various experiences and theories of sex, intimacy, and desire alongside intellectual and artistic engagements with power hierarchies and spirituality across transnational black communities. Subjects include the concept of "erotic subjectivity" from various theoretical and methodological angles, principally within African diasporic contexts. Only one of the following may be counted: African and African Diaspora Studies 372G (Topic: Sex and Power in the African Diaspora), 372G (Topic 33), Anthropology 324L (Topic: Sex and Power in the African Diaspora), 324L (Topic 48), Women's and Gender Studies 340 (Topic: Sex and Power in the African Diaspora), 340 (Topic 52).

**Topic 34: Jesus, Africa, and History.** Same as Religious Studies 360 (Topic 1). Exploration of the history of Christianity in Africa, from antiquity to the present, including the ways in which African interpretations and religious expressions of Christianity are presented in this history. Only one of the following may be counted: African and African Diaspora Studies 372G (Topic: Jesus, Africa, and History), 372G (Topic 34), Religious Studies 360 (Topic: Jesus, Africa, and History), 360 (Topic 1).

### AFR 373. Independent Research.

Supervised individual research on a problem in African and African diaspora studies. Conference course. May be repeated for credit. Prerequisite: Upper-division standing, African and African Diaspora Studies 301 or 303, and written consent of the supervising faculty member on forms available in the department office for that purpose.

### AFR 374C. Advanced Topics in African Studies.

Three lecture hours a week for one semester, with one laboratory hour a week if required by the topic. Only one of the following may be counted unless the topics vary: African and African Diaspora Studies 372C, 372D,

372E, 372F, 372G, 374C. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 3: Globalization, Transnationalism, and Internationalism.** Same as History 350R (Topic 29). Addresses the complex role of the United States in the greater scope of international relations in politics, with an emphasis on how political events in the United States reach the African continent in a variety of ways. Only one of the following may be counted: African and African Diaspora Studies 374C (Topic: Globalization, Internationalism, and Transnationalism), 374C (Topic 3), History 350R (Topic: Globalization, Internationalism, and Transnationalism), 350R (Topic 29). Prerequisite: Upper-division standing.

**Topic 4: History of Southern Africa.** Same as History 350L (Topic 72) and Women's and Gender Studies 340 (Topic 39). Only one of the following may be counted: African and African Diaspora Studies 374C (Topic: History of Southern Africa), 374C (Topic 4), History 350L (Topic: History of Southern Africa), 374C (Topic 72), Women's and Gender Studies 340 (Topic: History of Southern Africa), 340 (Topic 39). **Topic 5: Egyptian Hieroglyphics in Cultural Context.** Same as Classical Civilization 348 (Topic 17). The vocabulary and grammar of ancient Egypt as a guide to understanding artifacts and monuments from the different periods of Egyptian history, whether in museums, exhibitions, or on site overseas. Only one of the following may be counted: African and African Diaspora Studies 374C (Topic: Egyptian Hieroglyphics in Cultural Context), 374C (Topic 5), Classical Civilization 348 (Topic: Egyptian Hieroglyphics in Cultural Context), 348 (Topic: Egyptian Hieroglyphics in Cultural Context), 348 (Topic: Topic 5), Classical Civilization 348 (Topic: Egyptian Hieroglyphics in Cultural Context), 348 (Topic: Egyptian Hieroglyphics in Cultural Context), 348 (Topic: Egyptian Hieroglyphics in Cultural Context), 348 (Topic 17).

**Topic 6: Apartheid: South African History.** Same as History 364G (Topic 6) and Women's and Gender Studies 340 (Topic 42). A study of the social, political, economic, and cultural history of South Africa to contextualize the rise of apartheid. Primarily focuses on the period since 1948 from the perspectives of women, children, and men of all racial backgrounds who lived through that particular period. Only one of the following may be counted: African and African Diaspora Studies 374C (Topic: Apartheid and Resistance in South Africa), 374C (Topic: Apartheid: South African History), 374C (Topic: Apartheid: South African History), 364G (Topic: Apartheid and Resistance in South Africa), 364G (Topic: 340 (Topic: Apartheid: South African History), 340 (Topic 42).

### AFR 374D. Advanced Topics in Black United States Studies.

Three lecture hours a week for one semester, with one laboratory hour a week if required by the topic. Only one of the following may be counted unless the topics vary: African and African Diaspora Studies 372C, 372D, 372E, 372F, 372G, 374D. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 2: History of Black Entrepreneurship in the United States. Same as History 350R (Topic 12). African and African Diaspora Studies 374D (Topic 2) and History 350R (Topic 12) may not both be counted. Topic 3: Slavery in the United States. Same as History 350R (Topic 10). African and African Diaspora Studies 374D (Topic 3) and History 350R (Topic 10) may not both be counted.

**Topic 5: Race, Sport, and Identity.** Same as Sociology 322R. Explores the sociological significance of sport in relation to the construction of racialized identities. Focuses primarily but not exclusively on the black experience in sport, and examines the changing meanings given to sport throughout the twentieth century. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374 (Topic: Race, Sport, and Identity), 374D (Topic 5), Sociology 322R. Additional prerequisite: Upper-division standing.

**Topic 6: Black Americans and the South**. Same as American Studies 370 (Topic 31: Black Americans and the South). Traces the post-Reconstruction conversation among black Americans over how to live in the South and make sense of its history of widespread racial

violence, lynching, de jure segregation, civil rights struggles, and their legacies. Sources include authors such as Jean Toomer, Tayari Jones, and Natasha Trethewey, and fiction, speeches, newspaper accounts, photographs, paintings, poetry, and popular music, including jazz, blues, rock, rhythm and blues, and hip hop and rap. Only one of the following may be counted: African and African Diaspora Studies 374 (Topic: Black Americans and the South), 374D (Topic 6), American Studies 370 (Topic 31). Prerequisite: Upper-division standing. Topic 9: Black Women in America. Same as History 350R (Topic 17) and Women's and Gender Studies 340 (Topic 9). Uses primary sources, historical monographs, and essays to provide a chronological and thematic overview of the experiences of black women in America from their African roots to the circumstances they face in the present era. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: Black Women in America), 374D (Topic 9), History 350L (Topic: Black Women in America), 350R (Topic 17), Women's and Gender Studies 340 (Topic: Black Women in America), 340 (Topic 9).

**Topic 11: Psychology of the African American Experience.** Same as Educational Psychology 354G. Examination of the psychology of people of African descent using an African-centered liberatory model. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: Psychology of the African-American Experience), 374D (Topic 11), Educational Psychology 354G, 362 (Topic: Psychology of the African-American Experience), 362 (Topic 9: Psychology of the African-American Experience).

**Topic 12: African Americans in Sports.** Same as Curriculum and Instruction 373. Theoretical and practical complexities in issues surrounding African Americans in sports, including the relationship between athletics and higher education. Focuses on racial stereotyping, identity theory, and how practical knowledge of these theories can aid in understanding the current state of athletics. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: African Americans in Sports), 374D (Topic 12), Curriculum and Instruction 373.

**Topic 13: African American Politics.** Same as Government 370K (Topic 3). The evolution and role of African American politics within the American political system. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: African American Politics), 374D (Topic 13), Government 370K (Topic 3).

**Topic 14: The Black Church in African American Politics.** Same as Government 370K (Topic 4) and Religious Studies 346 (Topic 7). Examination of the political role of the black church and its leaders in the development of African American political behavior. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: Black Church in African American Politics), 374D (Topic 14), Government 370K (Topic 4), Religious Studies 346 (Topic: Black Church in African American Politics), 346 (Topic 7).

**Topic 15: Texas Black History.** Same as History 365G (Topic 7). Surveys the history of blacks in Texas from before American settlement to the present. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: Texas Black History), 374D (Topic 15), History 365G (Topic: Texas Black History), 365G (Topic 7).

**Topic 16: Antebellum Slavery.** Same as History 365G (Topic 6) and Women's and Gender Studies 340 (Topic 33). Examination of slavery at its maturity during the nineteenth century. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: Antebellum Slavery), 374D (Topic 16), History 365G (Topic: Antebellum Slavery), 365G (Topic 6), Women's and Gender Studies 340 (Topic: Antebellum Slavery), 340 (Topic 33).

**Topic 17: The United States in the Civil Rights Era.** Same as American Studies 321 (Topic 9) and History 356P. Examines United States

history in the post-World War II era, including how civil rights and other racial issues helped shape the politics, popular culture, and social life of this period. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: The United States in the Civil Rights Era), 374D (Topic 17), American Studies 321 (Topic: The United States in the Civil Rights Era), 321 (Topic 9), History 356P, Mexican American Studies 374 (Topic: The United States in the Civil Rights Era), 374 (Topic 36). Topic 18: The Civil Rights Movement from a Comparative Perspective. Same as History 350R (Topic 35). Focuses on African American and Mexican American struggles for civil rights. Asian American and Native American movements will also be addressed. Using a comparative approach the student will consider the distinctiveness of each of these struggles while also viewing them in relation to each other. Only one of the following may be counted: American Studies 370 (Topic: Civil Rts Mov from Comp Persp), African and African Diaspora Studies 374D (Topic: Civil Rts Mov from Comp Persp), 374D (Topic 18), History 350R (Topic: Civil Rts Mov from Comp Persp), 350R (Topic 35).

Topic 19: Blacks and Asians: Race and Social Movements. Same as Anthropology 324L (Topic 77) and Asian American Studies 330 (Topic 3). Examines the relations between Asians and Blacks in the United States. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: Blacks/Asians: Race/Social Movements), 374D (Topic 19), Anthropology 324L (Topic: Blacks/ Asians: Race/Social Movements), 324L (Topic 77), Asian American Studies 330 (Topic: Blacks/Asians: Race/Social Movements), 330 (Topic 3). Additional prerequisite: Upper-division standing. Topic 20: Domestic Slave Trade. Same as History 350R (Topic 24). Explores the inner workings of the domestic slave trade from the perspectives of slaveholders, speculators, and the enslaved. Analysis of maps, letters, diaries, newspaper advertisements, and legislation relating to the domestic slave trade. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: Domestic Slave Trade), 374D (Topic 20), History 350R (Topic: Domestic Slave Trade), 350R (Topic 24).

**Topic 21: African American Social and Political Thought.** Same as American Studies 321J, Core Texts and Ideas 326 (Topic 3), and Government 335M (Topic 10). Examines the speeches and writings by major theorists and critics of the prophetic tradition of black political thought. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: African American Social and Political Thought), 374D (Topic 21), American Studies 321 (Topic: African American Social and Political Thought), 321J, Core Texts and Ideas 326 (Topic 3), 335 (Topic: African American Social and Political Thought), Government 335M (Topic: African American Social and Political Thought), 335M (Topic 10). Additional prerequisite: Upper-division standing and six semester hours of lower-division coursework in government.

### AFR 374E. Advanced Topics in the African Diaspora.

Three lecture hours a week for one semester, with one laboratory hour a week if required by the topic. Only one of the following may be counted unless the topics vary: African and African Diaspora Studies 372C, 372D, 372E, 372F, 372G, 374E. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 2: The Politics of Race and Violence in Brazil. Same as Anthropology 324L (Topic 37: The Politics of Race and Violence in Brazil) and Latin American Studies 324L (Topic 14: The Politics of Race and Violence in Brazil). Prerequisite: Upper-division standing. Topic 3: Atlantic Slavery: History and Memory. Same as American Studies 370 (Topic 33: Atlantic Slavery: History and Memory). Charts a history of Atlantic slavery by focusing on primary sources detailing crucial events and contexts such as the Zong Massacre, the Haitian Revolution, and Dred Scott vs. Sandford, among others. Considers how historians, memoirists, fiction writers, visual and performance artists and filmmakers have come to terms with that history and its implications. Only one of the following may be counted: African and African Diaspora Studies 374E (Topic 3), American Studies 370 (Topic: Atlantic Slavery: History and Memory), 370 (Topic 33). Prerequisite: Upper-division standing.

**Topic 4: Reimagining Cuba, 1868-Present.** Same as History 347C and Latin American Studies 366 (Topic 22). Explores Cuban-United States relations from the nineteenth century to the present, including issues of empire and transnationalism, and social change engagements between Cuba and the United States before and after the Cuban Revolution. Only one of the following may be counted: African and African Diaspora Studies 374E (Topic: Reimagining Cuba, 1868-Present), 374E (Topic 4), History 347C, 363K (Topic: Reimagining Cuba, 1868-Present), Latin American Studies 366 (Topic 22). Additional prerequisite: Upper-division standing.

**Topic 6: Afro-Caribbean Diasporas.** Same as Latin American Studies 322 (Topic 19). Analysis of the socio-cultural contexts of the African diaspora in the Americas, with a specific focus on the African diaspora in the islands of the Caribbean. Designed to analyze the cultural, social, and philosophical contributions of these diasporic populations and the ways they build social and cultural agency in their specific national or diasporic contexts. Only one of the following may be counted: African and African Diaspora Studies 374E (Topic: Afro-Caribbean Diasporas), 374E (Topic 6), Latin American Studies 322 (Topic 19), 370S (Topic: Afro-Caribbean Diasporas).

#### AFR 374F. Advanced Topics in Black Expressive Culture.

Three lecture hours a week for one semester, with one laboratory hour a week if required by the topic. Only one of the following may be counted unless the topics vary: African and African Diaspora Studies 372C, 372D, 372E, 372G, 374F. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 4: Contemporary Women Authors. Same as English 370W (Topic 2: Contemporary Women Authors) and Women's and Gender Studies 345 (Topic 15: Contemporary Women Authors). Prerequisite: Nine semester hours of coursework in English or rhetoric and writing. Topic 6: Writing Slavery. Same as English 376M (Topic 3) and Women's and Gender Studies 340 (Topic 31). Explores the controversial rewriting of slavery in a presentist context by contemporary authors. Addresses challenges that archival limitations and revisionist writings about slavery pose for academic disciplines, literary instruction, and/or pedagogy. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Writing Slavery), 374F (Topic 6), English 376M (Topic: Writing Slavery), 376M (Topic 3), Women's and Gender 340 (Topic: Writing Slavery), 340 (Topic 31). Additional prerequisite: For English majors, nine semester hours of coursework in English or rhetoric and writing; for others, upper-division standing.

**Topic 7: Caribbean Literature.** Same as Comparative Literature 323 (Topic 6) and English 360L (Topic 2). Only one of the following may be counted: African and African Diaspora Studies 374F (Topic 7), Comparative Literature 323 (Topic 6), English 360L (Topic 2). Additional prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

**Topic 8: The Music of the African Diaspora.** Same as Latin American Studies 326 (Topic 5) and Music 334 (Topic 5). The musical legacy of the African slave trade in the Americas, the social contexts in which black musical forms have developed, and their varied forms. Subjects include the shifting meanings of "black music" in various contexts; the notion of hybridity; the uses of African influenced music as a political or oppositional tool; and African ethnic groups represented prominently in the New World, the traditions they brought with them,

and the ways they have been adapted to new ends. Three lecture hours and one laboratory hour a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Music of the African Diaspora), 374F (Topic 8), Latin American Studies 326 (Topic: Music of the African Diaspora), 326 (Topic 5), Music 334 (Topic: Music of the African Diaspora), 334 (Topic 5).

**Topic 9: Africana Women's Art.** Same as Art History 346L and Women's and Gender Studies 340 (Topic 46). Analysis of the diverse modes of presentation, mediums, definitions, and influences of Africana women artists in the diaspora. Designed to use critical theory and art history found in oral and written literatures, music, films, and other formal and informal documents. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Africana Women's Art), 374F (Topic 9), Art History 346L, 373C (Topic: Africana Women's Art), Women's and Gender Studies 340 (Topic: Africana Women's Art), 340 (Topic 46). Prerequisite: Upper-division standing.

**Topic 10: Visual Cultures of Africa.** Same as Art History 346M. Painting, textiles, ceramics, sculpture, performance, mixed media, photography, films, and the aesthetic ideas behind the production of African visual cultures from the perspectives of rituals, rites of passage, celebrations, initiations, documentations, and expressions. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Visual Cultures of Africa), 374F (Topic 10), Art History 346M, 373C (Topic: Visual Cultures of Africa).

**Topic 11: Introduction to African Art.** Same as Art History 346K. Investigates the lives and works of several artists who have made substantial contributions to the definition, history, and interpretation of the visual arts. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Introduction to African Art), 374F (Topic 11), Art History 346K, 373C (Topic: Introduction to African Art), 374 (Topic: Introduction to African Art), Women's and Gender Studies 340 (Topic: Introduction to African Art).

**Topic 12: Visual Arts of the Caribbean.** Same as Art History 345M. A look at a wide range of artists from the countries of the Caribbean, including examples of cinema and reggae music packaging. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 372G (Topic: Visual Arts of the Caribbean), 374F (Topic: Visual Arts of the Caribbean), 374F (Topic 12), Art History 345M, 373D (Topic: Visual Arts of the Caribbean), 374 (Topic: Visual Arts of the Caribbean).

**Topic 13: Diaspora Visions.** Same as Art History 345L and Women's and Gender Studies 340 (Topic 48). An exploration of border crossing by cultures and groups including Yorubas, Jews, Armenians, Tibetans, Hamish, Pakistanis, and Indians and the production of images by immigrants, exiles, and nomads in alien lands. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Diaspora Vision), 374F (Topic 13), Art History 345L, 373D (Topic: Diaspora Visions), 374 (Topic: Diaspora Vision), Women's and Gender Studies 340 (Topic: Diaspora Vision), 340 (Topic 48).

**Topic 14: Contemporary British Artists of the African Diaspora.** Same as Art History 345K. A look at a wide range of artists, practicing in Britain, who are part of the African diaspora via such factors as the Atlantic slave trade and various patterns of international migration. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Contemporary British Artists of the African Diaspora), 374F (Topic 14), Art History 345K, 374 (Topic: Contemporary British Artists of the African Diaspora).

Topic 15: Contemporary Artists of the African Diaspora. Same as Art History 345J. Examines a wide range of artists, practicing in different parts of the world, who are part of the African diaspora via such factors as the Atlantic slave trade and various patterns of international migration. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Contemporary Artists of the African Diaspora), 374F (Topic 15), Art History 345J, 373D (Topic: Contemporary Artists of the African Diaspora), 374 (Topic: Contemporary Artists of the African Diaspora).

**Topic 18: Historical Imagining of Africa in Films.** Same as History 350L (Topic 70) and Women's and Gender Studies 340 (Topic 40). Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Historical Imagining of Africa in Film), 374F (Topic 18), History 350L (Topic: Historical Imagining of Africa in Film), 350L (Topic 70), Women's and Gender Studies 340 (Topic: Historical Imagining of Africa in Film), 340 (Topic 40).

Topic 19: Twentieth-Century African American Art. Same as Art History 344J. A survey of visual art produced by people of African descent in the United States with an emphasis on the twentieth century and its sociohistorical framework. Changes in modes of expression, formal concerns, pictorial themes, and the impact of the Black Arts movement, feminism, and Afrocentrism on art are explored, as well as the relationship of the work of black artists to art from West and Central Africa and the visual traditions of European and Euro-American artists. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 372E (Topic: Twentieth-Century African American Art), 374F (Topic: 20th-Century African American Art), 374F (Topic 19), Art History 344J, 366N (Topic: 20th-Century African American Art). Topic 21: Literature of Black Politics. Same as American Studies 370 (Topic 43). Examines the novels, plays, and critical essays of Ralph Ellison, James Baldwin, and Toni Morrison as works of democratic political theorizing and political engagement. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Literature of Black Politics), 374F (Topic 21), American Studies 370 (Topic: Literature of Black Politics), 370 (Topic 43), Core Texts and Ideas 345 (Topic: Literature of Black Politics), Western Civilization 320 (Topic: Literature of Black Politics).

**Topic 22: Music of Mexico and the Caribbean.** Same as Latin American Studies 326 (Topic 1) and Music 334 (Topic 1). Introduction to the history of Mexican and Caribbean traditional and commercial music, with some discussion of classical music as well. Attention will be given to music of indigenous, African, European, and mixed origin. Mexico and the Spanish-speaking Caribbean receive special attention. Class meetings will be divided into lecture/discussion segments, videos, listening, and performance instruction/demonstration. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Music of Mexico and the Caribbean), 374F (Topic 22), Latin American Studies 322 (Topic: Music of Mexico and the Caribbean), 326 (Topic 1), Music 334 (Topic 1). Prerequisite: Upperdivision standing.

### AFR 375. Community Internship.

Internship in a community organization that facilitates the economic, political, and social development of Austin's African American community. Students participate in research projects under the supervision of a faculty member. Approximately eight hours of fieldwork a week for one semester. Additional lecture hours may be required. Prerequisite: Upper-division standing, African and African Diaspora Studies 301, and consent of instructor.

### AFR 376. Senior Seminar.

Restricted to majors in African and African diaspora studies. A capstone course focusing on black intellectual traditions. Three lecture hours a week for one semester. Prerequisite: Completion of seventy-five semester

hours of college coursework, African and African Diaspora Studies 301, and consent of instructor.

### AFR 679H. Honors Tutorial Course.

For honors candidates in African and African diaspora studies. Individual reading of selected works for one semester, followed in the second semester by the writing of an honors thesis. Conference course for two semesters. Prerequisite: For 679HA, admission to the African and African Diaspora Studies Honors Program no later than two semesters before expected graduation; for 679HB, African and African Diaspora Studies 679HA. A University grade point average of at least 3.00 and a grade point average in African and African diaspora studies of at least 3.50 are required for admission to the African and African Diaspora Studies Honors Program.

### Swahili: SWA

### **Lower-Division Courses**

### SWA 601C. Intensive Swahili I.

Six lecture hours a week for one semester. Swahili 601C and 506 may not both be counted. Swahili 601C and 507 may not both be counted.

### SWA 506. First-Year Swahili I.

Five lecture hours a week for one semester. Swahili 601C and 506 may not both be counted.

### SWA 507. First-Year Swahili II.

Five lecture hours a week for one semester. Swahili 601C and 507 may not both be counted. Prerequisite: Swahili 506.

### SWA 611C. Intensive Swahili II.

Six lecture hours a week for one semester. Swahili 611C and 312K may not both be counted. Swahili 611C and 312L may not both be counted. Prerequisite: Swahili 601C.

### SWA 612. Accelerated Second-Year Swahili.

Not open to native speakers of Swahili. Eight lecture hours a week for one semester.

### SWA 312K. Second-Year Swahili I.

Three lecture hours a week for one semester. Swahili 611C and 312K may not both be counted. Prerequisite: Swahili 507.

### SWA 312L. Second-Year Swahili II.

Three lecture hours a week for one semester. Swahili 611C and 312L may not both be counted. Prerequisite: Swahili 312K.

### **Upper-Division Courses**

## SWA 360. Conference Course in Swahili Language and Literature.

Supervised individual study of selected problems in Swahili language or literature. Conference course. May be repeated for credit. Prerequisite: Consent of instructor.

### Yoruba: YOR

### **Lower-Division Courses**

### YOR 601C. Beginning Yoruba.

An intensive beginning course with an emphasis on basic skills: listening, speaking, reading, and writing. Six lecture hours a week for one semester. Yoruba 601C and 506 may not both be counted. Yoruba 601C and 507 may not both be counted.

### YOR 506. First-Year Yoruba I.

Restricted to non-native speakers of Yoruba. Standard Yoruba of southwest Nigeria. Five lecture hours a week for one semester. Yoruba 601C and 506 may not both be counted.

### YOR 507. First-Year Yoruba II.

Restricted to non-native speakers of Yoruba. Continuation of the study of standard Yoruba of southwest Nigeria. Five lecture hours a week for one semester. Yoruba 601C and 507 may not both be counted. Prerequisite: Yoruba 506 with a grade of at least C.

### YOR 611C. Intermediate Yoruba.

An intensive intermediate course with emphasis on basic skills: listening, speaking, reading, and writing. Six lecture hours a week for one semester. Yoruba 611C and 312K may not both be counted. Yoruba 611C and 312L may not both be counted. Prerequisite: Yoruba 601C or 507 with a grade of at least C.

### YOR 312K. Second-Year Yoruba I.

Oral expression, reading, and comprehension. Three lecture hours a week for one semester. Yoruba 611C and 312K may not both be counted. Prerequisite: Yoruba 601C or 507 with a grade of at least C.

### YOR 312L. Second-Year Yoruba II.

Continuation of the study of oral expression, reading, and comprehension. Three lecture hours a week for one semester. Yoruba 611C and 312L may not both be counted. Prerequisite: Yoruba 312K with a grade of at least C.

# Upper-Division Courses Department of American Studies

### **American Studies: AMS**

### **Lower-Division Courses**

### AMS 310. Introduction to American Studies.

Same as History 315G. An interdisciplinary introduction to the historical exploration of American culture. Three lecture hours a week for one semester. American Studies 310 and History 315G may not both be counted.

### AMS 311S. Introductory Seminar in American Studies.

Writing, reading, and discussion on an American studies topic, with emphasis on the evaluation of information, analytical reading, and critical writing. Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

**Topic 1: Consumer Culture in America.** Examines consumer culture in the United States through historical and theoretical texts, including film, books, and scholarly works.

**Topic 2: American Sports and Culture.** Examines how the games Americans play reflect beliefs about success, class hierarchies, gender roles, race relations, and global ambitions.

**Topic 3: United States Culture and Globalization.** Introduction to the concepts and processes of globalization and how globalization has shaped and been shaped by culture in the United States at different periods in history.

**Topic 4: American Places of Leisure.** Explores the history of American amusement spaces, using them as a lens through which to explore larger currents of cultural change. Subjects include issues of race, gender, class, corporate history, globalization, and the rise of convergence culture, all as played out within recreational spaces.

American Studies 311S (Topic: American Places of Leisure) and 311S (Topic 4) may not both be counted.

### AMS 315. Topics in American Life.

Interdisciplinary exploration of American cultural and intellectual life. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Introduction to Asian American Studies.** Same as Asian American Studies 301. Introduces the interdisciplinary study of Asian immigrants and Asian Americans in the United States. Explores key concepts, including immigration history, identity and community formation, cultural representation, and the intersections of race, class, gender, and sexuality. Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 315 (Topic: Introduction to Asian American Studies), 315 (Topic 1), Asian American Studies 301, Sociology 308 (Topic: Introduction to Asian American Studies).

**Topic 2: Mixed Race Identities.** Same as Asian American Studies 310 (Topic 3). Analyzes the historical and contemporary significance of issues of "race" and "mixing" in a North American context. Subjects include the situation of "mixed race" people throughout United States history; historical policies that have shaped racial formation in the United States; comparative conceptions of "mixed" people transnationally; and racial, ethnic, and cultural identity. Only one of the following may be counted: American Studies 315 (Topic: Mixed Race and the Media), 315 (Topic 2), Asian American Studies 310 (Topic: Mixed Race and the Media), 310 (Topic 3).

Topic 3: Race, Immigration, and Family. Same as Asian American Studies 310 (Topic 5) and Women's and Gender Studies 301 (Topic 24). Introduction to family systems in the United States in a post-WWII framework with a central focus on Asian Americans. Students will investigate how gender, race, and ethnicity intersect and inform our understanding of the institution of the family. Only one of the following may be counted: American Studies 315 (Topic: Alternative Family Systems), 315 (Topic 3), Asian American Studies 310 (Topic: Alternative Family Systems), 310 (Topic 5), Women's and Gender Studies 301 (Topic: Alternative Family Systems), 301 (Topic 24). Topic 5: History of Religion in the United States. Same as History 317L (Topic 16) and Religious Studies 316U (Topic 1). Explores instances of religious dominance and religious diversity in United States history. Moving from the pre-colonial period to the present, it examines the changing circumstances of several religious communities, including American Indians and Puritans, Protestant evangelicals, Mormons, Roman Catholics, Jews, Muslims, and Hindus. Only one of the following may be counted: American Studies 315 (Topic: History of Religion in the United States), 315 (Topic 5), History 317L (Topic: History of Religion in the United States), 317L (Topic 16), Religious Studies 316U (Topic: History of Religion in the United States), 316U (Topic 1).

**Topic 6: American Jews: The Yiddish Experience.** Same as German, Scandinavian, and Dutch Studies 310 (Topic 1), Jewish Studies 311 (Topic 9), and Religious Studies 316K (Topic 2). Focuses on over a century of Yiddish-based contributions to American literature, music, and film, including works by Isaac Bashevis Singer, Michael Chabon, Woody Allen, and the Marx Brothers. Only one of the following may be counted: American Studies 315 (Topic: Jews in America: The Yiddish Experience), 315 (Topic 4), 315 (Topic 6); German, Scandinavian, and Dutch Studies 310 (Topic: Jews in America: The Yiddish Experience), 310 (Topic 1); Jewish Studies 311 (Topic: Jews in America: The Yiddish Experience), 311 (Topic 6), 311 (Topic 9); Religious Studies 313 (Topic: Jews in America: The Yiddish Experience), 316K (Topic 2).

**Topic 7: Asian American Film History.** Same as Asian American Studies 310 (Topic 6). Only one of the following may be counted:

American Studies 315 (Topic: Asian American Film History), American Studies 315 (Topic 7), Asian American Studies 310 (Topic: Asian American Film History), Asian American Studies 310 (Topic 6), Radio-Television-Film 301N (Topic: Asian American Film History). **Topic 8: Germany and Globalization**. Same as European Studies 308 (Topic 1) and German, Scandinavian, and Dutch Studies 311F. Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 315 (Topic: Germany and Globalization), 315 (Topic 8), European Studies 308 (Germany and Globalization), 308 (Topic 1), German, Scandinavian, and Dutch Studies 310 (Topic: Germany and Globalization), 311F, Germanic Civilization 301 (Topic: Germany and Globalization).

### AMS 315C. Movies Go To War.

Same as Comparative Literature 305 (Topic 3), European Studies 307 (Topic 4), and German, Scandinavian, and Dutch Studies 311C. A comparison of films from various nations about major twentieth century wars to the historical facts of the conflicts as practicums in critical comparative analysis of histories as representations. Only one of the following may be counted: American Studies 315 (Topic: Movies Go to War, World War I to Vietnam), 315C, Comparative Literature 305 (Topic: Movies Go to War, World War I to Vietnam), 305 (Topic 3), European Studies 307 (Topic: Movies Go to War, World War I to Vietnam), 307 (Topic 4), German, Scandinavian, and Dutch Studies 311C, Germanic Civilization 311 (Topic 2: Movies Go to War, World War I to Vietnam).

## AMS 315D. Anthropology of Race and Ethnicity: An Introduction.

Same as Anthropology 310L (Topic 2: Anthropology of Race and Ethnicity: An Introduction) and African and African Diaspora Studies 317D (Topic 2: Anthropology of Race and Ethnicity: An Introduction). Examines the social importance of race and ethnicity both in America and around the world. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 317D (Topic 2) and American Studies 315 (Topic: Anthropology of Race and Ethnicity), 315D, Anthropology 310L (Topic 2).

### AMS 315F. Native American Literature and Culture.

Same as English 314V (Topic 5: Native American Literature and Culture). Studies Native American literature from different regions and cultures and considers this literary tradition in tribal national and United States national contexts. Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 315 (Topic: Native American Literature and Culture), 315F, English 314V (Topic 5). Prerequisite: English 603A, Rhetoric and Writing 306, 306Q, or Tutorial Course 603A.

### AMS 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in American Studies.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of American Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

### AMS 321. Studies in American Societies.

A study of America through its geography, language, government, or cultures. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites vary with the topic. **Topic 1: Native American Cultures of the Greater Southwest.** Same as Anthropology 322M (Topic 3: Native American Cultures of the Greater Southwest).

**Topic 2: Language and Speech in American Society.** Same as Anthropology 325N, Linguistics 373 (Topic 2: Language and Speech in American Society), and Sociology 352M (Topic 3: Language and Speech in American Society). Prerequisite: Upper-division standing, and Anthropology 302, 305, 307, or Linguistics 306.

Topic 3: Native American Cultures North of Mexico. Same as Anthropology 336L.

Topic 4: America and the Holocaust. Same as History 356R and Jewish Studies 365 (Topic 1). Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 321 (Topic 4), 370 (Topic: America and the Holocaust), History 350L (Topic: America and the Holocaust), 356R, 365G (Topic: America and the Holocaust), Jewish Studies 361 (Topic: America and the Holocaust), 365 (Topic 1), Liberal Arts Honors 350 (Topic: America and the Holocaust). Additional prerequisite: Upper-division standing. Topic 5: Asian American Jurisprudence. Same as Asian American Studies 325 (Topic 5: Asian American Jurisprudence) and Government 357M (Topic 9: Asian American Jurisprudence). Introduction to the study of Asian Americans and the law. Examines the historical development of United States law and its relationship to Asian Americans, and of Asian American jurisprudence as an independent field of legal scholarship. Three lecture hours a week for one semester. Additional prerequisite: Upper-division standing.

Topic 6: Race, Gender, and Surveillance. Same as African and African Diaspora Studies 372C (Topic 12), Sociology 322V, and Women's and Gender Studies 322 (Topic 8). Overview of theories in the sociology of social control, with a focus on risk, power, ethics, and surveillance. Examines historical transformations in social control and the distributions of power in the United States and global contexts, with attention to race, gender, and class. Subjects include: the transatlantic slave trade; prisons and punishment; the gaze, voyeurism, and reality television watching; the Internet; travel and state borders; privacy; and biometrics and the body. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 372C (Topic 12), 374E (Topic: Surveillance and Social Control), American Studies 321 (Topic 6), Sociology 321K (Topic: Surveillance and Social Control), 322V, Women's and Gender Studies 322 (Topic: Surveillance and Social Control), 322 (Topic 8). Additional prerequisite: Upper-division standing.

Topic 7: Social Movements. Same as Sociology 352. Characteristics of crowds, publics, and social movements; their role in social organization and social change. Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 321 (Topic: Social Movements), American Studies 321 (Topic 7), Sociology 352. Additional prerequisite: Upper-division standing. Topic 8: Urban Unrest. Same as Asian American Studies 330 (Topic 6), African and African Diaspora Studies 372F (Topic 13), Anthropology 324L (Topic 46), and Urban Studies 354 (Topic 14). Analysis of the roots of urban unrest, exploring a range of origins: joblessness, state violence, white flight, backlash against civil rights gains, new immigration, and interracial strife. Beyond race and class, subjects include exploring unrest as a mode of pushing the normative boundaries of gender and sexuality in public space. Course material will draw from film, literature, history, geography, and anthropology. Only one of the following may be counted: African and African Diaspora Studies 372F (Topic: Urban Unrest), 372F (Topic 13), 374D (Topic: Urban Unrest), American Studies 321 (Topic: Urban Unrest), 321 (Topic 8), Anthropology 324L (Topic: Urban Unrest), 324L (Topic 46), Asian American Studies 330 (Topic: Urban Unrest), 330 (Topic 6), Urban Studies 354 (Topic: Urban Unrest), 354 (Topic 14). Topic 9: The United States in the Civil Rights Era. Same as African and African Diaspora Studies 374D (Topic 17) and History 356P. Examines

United States history in the post-World War II era, including how civil rights and other racial issues helped shape the politics, popular culture, and social life of this period. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: The United States in the Civil Rights Era), 374D (Topic 17), American Studies 321 (Topic: The United States in the Civil Rights Era), 321 (Topic 9), History 356P, Mexican American Studies 374 (Topic: The United States in the Civil Rights Era), 374 (Topic 36).

**Topic 10: Women and Social Movements in the Twentieth-Century United States.** Same as African and African Diaspora Studies 372C (Topic 7), History 365G (Topic 8), and Women's and Gender Studies 340 (Topic 53). Examines women's participation in well-known and lesser-known social movements during the twentieth century. Only one of the following may be counted: African and African Diaspora Studies 372C (Topic: Women and Soci Mvmnts in US), 372C (Topic 7), American Studies 321 (Topic: Women/Social Movements in US), 321 (Topic 10), History 365G (Topic: Women/Social Movements in US), 365G (Topic 8), Women's and Gender Studies 340 (Topic: Women/Soci Movements in US), 340 (Topic 53).

**Topic 11: The Vietnam Wars.** Same as History 365G (Topic 4). Introduction to the complex and controversial history of the wars fought in Vietnam from 1941 to the 1980s. Only one of the following may be counted: American Studies 321 (Topic: Vietnam Wars), 321 (Topic 11), Asian Studies 372 (Topic: Vietnam Wars), History 365G (Topic: Vietnam Wars), 365G (Topic 4).

**Topic 12: Race, Internet, and Social Media.** Same as Asian American Studies 320 (Topic 7). Explores the critical, theoretical and practical analysis of race and new media. Only one of the following may be counted: American Studies 321 (Topic: Race, Internet & Social Media), American Studies 321 (Topic 12), Asian American Studies 320 (Topic: Race, Internet & Social Media), Asian American Studies 320 (Topic 7), Radio-Television-Film 359 (Topic: Race, Internet & Social Media). Additional prerequisite: Upper-division standing.

### AMS 321E. African American History to 1860.

Same as African and African Diaspora Studies 357C and History 357C. Review of West African origins; New World settlement patterns, social life, and culture; discussion of the Atlantic slave trade, the development of capitalism and plantation slavery, and the origins of racism. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 357C, American Studies 321 (Topic: African American History to 1860), 321E, History 357C. Prerequisite: Upper-division standing.

### AMS 321F. African American History since 1860.

Same as African and African Diaspora Studies 357D, History 357D, and Urban Studies 353 (Topic 1). Survey of the history of African Americans in the United States from 1860 to the present: Emancipation, Reconstruction politics, migration and urbanization, and the evolution of African American culture; kinds of sources and methods valuable for analyzing African American life and culture. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 357D, American Studies 321 (Topic: African American History since 1860), 321F, History 357D, Urban Studies 353 (Topic 1). Prerequisite: Upper-division standing.

#### AMS 321G. Native Americans in Texas.

Same as Anthropology 326C. Studies the history of Native Americans in Texas using concepts and evidence from anthropology, history, archaeology, historical geography, and Native American studies. Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 321 (Topic: Native Americans in Texas), 321G, Anthropology 324L (Topic: Native American in Texas). Prerequisite: Upper-division standing.

### AMS 321J. African American Social and Political Thought.

Same as African and African Diaspora Studies 374D (Topic 21), Core Texts and Ideas 326 (Topic 3), and Government 335M (Topic 10). Examines the speeches and writings by major theorists and critics of the prophetic tradition of black political thought. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: African American Social and Political Thought), 374D (Topic 21), American Studies 321 (Topic: African American Social and Political Thought), 321 J, Core Texts and Ideas 326 (Topic 3), 335 (Topic: African American Social and Political Thought), Government 335M (Topic: African American Social and Political Thought), 335M (Topic 10). Prerequisite: Upper-division standing and six semester hours of lower-division coursework in government.

#### AMS 322. Studies in American Writing.

A study of America through its literature, popular fiction, journalism, and folklore. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites vary with the topic.

### AMS 325. Studies in American Art and Media Culture.

Study of American culture and society through media and the arts. Three lecture hours or two lecture hours and one discussion hour a week for one semester; additional hours may be required for some topics. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 2: Painting in America to 1860.** Same as Art History 339N. Painting in British colonial North America and the United States prior to the Civil War. Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 325 (Topic 2), Art History 339N, 374 (Topic 1).

**Topic 3: Painting in the United States, 1860-1913.** Same as Art History 339P. Painting in the United States from the Civil War to the Armory Show. Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 325 (Topic 3), Art History 339P, 374 (Topic 2).

#### AMS 325C. Popular Music in the United States.

Same as History 365G (Topic 2). Traces the history of popular music in the United States and its influence on American politics, economics, and culture from the 1880s to present day. Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 321 (Topic: Popular Music in the US), 325C, History 365G (Topic: Popular Music in the US), 365G (Topic 2). Prerequisite: Upper-division standing.

#### AMS 327. Studies in Religion and Philosophy.

Interdisciplinary exploration of religion and philosophy in American culture. Three lecture hours or two lecture hours and one laboratory/ discussion hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites may vary with the topic.

**Topic 4: United States Catholic History.** Same as History 365G (Topic 1), Mexican American Studies 374 (Topic 37), and Religious Studies 346 (Topic 5). Examines how Catholicism and national identity work for Catholics in the United States, with an emphasis on Catholic women and Latinos/as. Only one of the following may be counted: American Studies 321 (Topic: United States Catholic History), 327 (Topic 4), History 365G (Topic: United States Catholic History), 365G (Topic 1), Mexican American Studies 374 (Topic: United States Catholic History), 374 (Topic 37), Religious Studies 346 (Topic: United States Catholic History), 346 (Topic 5).

**Topic 5: Evangelical Christianity.** Same as Religious Studies 346 (Topic 6). An introduction to the intellectual and social sources of evangelical Protestant traditions in the United States, their varieties of belief and practice, and their role in the wider Christian community and American society. Only one of the following may be counted: American Studies 327 (Topic: Evangelical Christianity), 327 (Topic 5), Religious Studies 346 (Topic: Evangelical Christianity), 346 (Topic 6). Prerequisite: Upper-division standing.

Topic 6: Religion in the American South. Same as Religious Studies 375S (Topic 6). Examines the social construction and cultural meaning of southern religion using fictional characterizations, philosophical reflections, historical accounts, and theoretical comparisons. Only one of the following may be counted: American Studies 327 (Topic: Religion in the American South), 327 (Topic 6), Religious Studies 375S (Topic: Religion in the American South), 375S (Topic 6). Additional prerequisite: Upper-division standing and at least six semester hours of coursework in religious studies. **Topic 8: Religion in the American West.** Same as Religious Studies 346G. Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 327 (Topic: Religion in the American West), 327 (Topic 8), Religious Studies 346 (Topic: Religion in the American West), 346G. Additional prerequisite: Upper-

division standing.

### AMS 329. Environmental History of North America.

Same as History 350R (Topic 7) and Urban Studies 353 (Topic 5). The history of humanity's influence on the plants, animals, microlife, soils, water, and air of North America, and vice versa, from the arrival of the proto-Indians to the contemporary environmental crisis. Only one of the following may be counted: American Studies 329, History 350R (Topic 7), Urban Studies 353 (Topic 5).

### AMS 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in American Studies.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of American Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### AMS 330. Modernism in American Design and Architecture.

Same as Art History 339Q and Urban Studies 352 (Topic 5). A historical survey of artifacts, buildings, and urban environments, focusing on responses to machine-age civilization. Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 330, Art History 339Q, Urban Studies 352 (Topic: Modernism in American Design and Architecture), 352 (Topic 5). Prerequisite: Upper-division standing.

#### AMS 355. Main Currents of American Culture to 1865.

Same as History 355N. Traces the development of American culture and society from the colonial era until the end of the Civil War. Major themes include racial conflict, religion, slavery, the development of democracy, and cultural reform. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

### AMS 356. Main Currents of American Culture since 1865.

Same as History 356K. Traces the development of American culture and society from the end of the Civil War to the present. Major themes include racial conflict, pluralism, religion, urban development and reform, modernism, government centralization, cultural radicalism, and the rebirth of conservatism. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

### AMS 358. The United States, 1920-1941.

Same as History 355M. A history of political, economic, diplomatic, military, social, and cultural developments in the United States between the two world wars. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

### AMS 370. Seminar in American Culture.

Interdisciplinary seminar on themes in American life. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites may vary with the topic.

**Topic 1: American Cultural History of Alcohol and Drugs.** Same as History 350R (Topic 5). Study of the American use and perception of drugs, including alcohol, and how they have changed over time. Examines significant shifts in American attitudes toward individualism and social control. American Studies 370 (Topic 1) and History 350R (Topic 5) may not both be counted.

**Topic 5: Race, Law, and United States Society.** Same as African and African Diaspora Studies 360 and History 365G (Topic 13). Examines the intersection of racial ideology and legal culture in the United States. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 360, 372F (Topic: Race, Law, and US Society), American Studies 370 (Topic: Race, Law, and US Society), 370 (Topic 5), History 365G (Topic: Race, Law, and US Society), 365G (Topic 13). Additional prerequisite: Upper-division standing.

Topic 6: Gender-Based Discrimination. Same as Government 357M (Topic 1: Gender-Based Discrimination) and Women's and Gender Studies 345 (Topic 8: Gender-Based Discrimination). Studies the substance of laws that relate to gender-based roles, and the participation of women in the legal process. Additional prerequisite: Upper-division standing, six semester hours of lower-division coursework in government, a University grade point average of at least 3.50, and consent of department received prior to registering. Topic 10: Leadership in America. Same as Government 370L (Topic 2: Leadership in America) and Women's and Gender Studies 345 (Topic 34: Leadership in America). Introduction to the concepts of leadership and the application of those concepts in public and political leadership. Additional prerequisite: Upper-division standing, six semester hours of lower-division coursework in government, a University grade point average of at least 3.50, and consent of department received prior to registering.

**Topic 13: The Culture of Cities.** Same as Geography 356T (Topic 1: The Culture of Cities) and Urban Studies 354 (Topic 4: The Culture of Cities). Examines the social, geographical, and cultural evolution of the United States from a rural and small-town society to an urban and suburban nation. Subjects may include the segregation of public and private space; the formation of urban subcultures organized by gender, work, race, religion, and sexuality; social and spatial divisions between rich and poor and native-born and immigrant; and the increasing importance of "cultural capital" in reshaping urban politics and in conflicts over revitalization and gentrification. Additional prerequisite: Upper-division standing.

**Topic 17: Postmodern America.** Postmodernity considered as a means of understanding major cultural transformations since 1945 in areas such as architecture, art, criticism, film, journalism, literature, music, philosophy, photography, and political thought.

**Topic 18: The Beats and American Culture, 1945 to 1990.** Examines writers such as Kerouac, Ginsberg, and Burroughs during the immediate post-World War II era. Considers their historical origins, their representations of society and culture, and their influence from

the 1960s through the 1980s on writers and artists in a variety of fields.

**Topic 19: The Cold War and American Childhood.** Uses childhood as a focus for studying the cultural and political climate of the post-World War II era.

**Topic 20: Children's Literature and American Culture.** Examines changes in American childhood using children's literature that covers several different time periods.

**Topic 21: Society, Culture, and Politics in the 1960s.** Various social and cultural movements of the 1960s, including civil rights, the New Left, black power and other ethnic nationalisms, the peace movement, the black arts movement, guerrilla theater, psychedelic arts and the counterculture, women's liberation, gay liberation, the environmental movement, and the conservative movement.

**Topic 22: Deviance in America: An Alternative History.** Same as History 350R (Topic 6). Examines movements and individuals outside the conventional mainstream and how they reflect American ideals and dilemmas. American Studies 370 (Topic 22) and History 350R (Topic 6) may not both be counted.

**Topic 23: Memory and Place.** Same as Geography 356T (Topic 2: Memory and Place). Explores how cultural memory is produced in its various forms, from memorials, public art, and commodities to popular culture, rituals, and museums, and how public remembering is inevitably anchored in specific geographic places. Additional prerequisite: Upper-division standing.

**Topic 24: Comparative Cultures of Beauty.** Same as Asian American Studies 320 (Topic 2: Comparative Cultures of Beauty) and Women's and Gender Studies 345 (Topic 45: Comparative Cultures of Beauty). Examines fashion and beauty as discourses and cultural practices affecting identity, body politics, race, gender, sexuality, and class. Additional prerequisite: Upper-division standing.

Topic 25: Immigrants, Amusements, and Consumer Culture. Same as Asian American Studies 320 (Topic 1: Immigrants, Amusements, and Consumer Culture). Studies the growth of consumer capitalism as it coincides with the migration and integration of immigrants into American society. Examines the emergence of consumer culture as a force that defines modern American society and traces its developments and current manifestations throughout the world. **Topic 26: American Food**. Same as Women's and Gender Studies 345 (Topic 41: American Food). Studies diverse American food cultures from a humanities perspective, exploring connections between global, national, and local communities. Uses scholarship in the field of food studies as well as cookbooks, novels, poetry, photographs, songs, documentaries, and oral histories to investigate the past and present of American food communities.

**Topic 27: Nature and Gender in America.** Same as Women's and Gender Studies 345 (Topic 42: Nature and Gender in America). Study of the connections between nature and gender in American national narratives. Explores how Americans of differing classes, races, genders, sexual orientations, and ages have shaped and experienced changing ideas of America, wilderness, domestication, and society over time and in different regions of the country.

Topic 28: Animals and American Culture. Same as History 350R (Topic 9) and Women's and Gender Studies 345 (Topic 43). Explores the role of animals in American history, culture, and society. Only one of the following may be counted: American Studies 370 (Topic 28), History 350R (Topic 9), Women's and Gender Studies 345 (Topic 43). Topic 29: Women Radicals and Reformers. Same as Women's and Gender Studies 345 (Topic 43). Traces traditions of women's radical activism and reform beginning with the Enlightenment and the American Revolution and continuing to the present, with concentration on the twentieth century. Topic 30: Women in Postwar America. Same as History 350R (Topic 8) and Women's and Gender Studies 345 (Topic 37). Only one of the following may be counted: American Studies 370 (Topic 30), History 350R (Topic 8), Women's and Gender Studies 345 (Topic 37). **Topic 31: Black Americans and the South.** Same as African and African Diaspora Studies 374D (Topic 6: Black Americans and the South). Traces the post-Reconstruction conversation among black Americans over how to live in the South and make sense of its history of widespread racial violence, lynching, de jure segregation, civil rights struggles, and their legacies. Sources include authors such as Jean Toomer, Tayari Jones, and Natasha Trethewey, and fiction, speeches, newspaper accounts, photographs, paintings, poetry, and popular music, including jazz, blues, rock, rhythm and blues, and hip hop and rap. Only one of the following may be counted: African and African Diaspora Studies 374 (Topic: Black Americans and the South), 374D (Topic 6), American Studies 370 (Topic 31).

**Topic 32: Slavery across Genres.** Same as African and African Diaspora Studies 372E (Topic 2). Uses nonfictional and fictional narrative accounts of slavery in the United States to examine the political, social, cultural, economic, and psychological aspects of the institution of slavery at different historical moments. Sources may include authors such as Frederick Douglass, Toni Morrison, William Faulkner, Harriet Beecher Stowe, and Edward P. Jones; graphic novels; conceptual art; court records; and bills of sale. Only one of the following may be counted: African and African Diaspora Studies 372E (Topic 2), American Studies 370 (Topic: Slavery across Genres), 370 (Topic 32).

**Topic 33: Atlantic Slavery: History and Memory.** Same as African and African Diaspora Studies 374E (Topic 3: Atlantic Slavery: History and Memory). Charts a history of Atlantic slavery by focusing on primary sources detailing crucial events and contexts such as the Zong Massacre, the Haitian Revolution, and Dred Scott vs. Sandford, among others. Considers how historians, memoirists, fiction writers, visual and performance artists and filmmakers have come to terms with that history and its implications. Only one of the following may be counted: African and African Diaspora Studies 374E (Topic 3), American Studies 370 (Topic: Atlantic Slavery: History and Memory), 370 (Topic 33).

**Topic 34: American Disasters.** Examines natural and human-made disasters as key turning points in American history. Engages with the politics of disasters, analyzing environmental contexts, grassroots activism, legislative policies, and approaches toward commemoration. **Topic 35: American Popular Culture, 1682-Present.** Same as History 350R (Topic 19) and Women's and Gender Studies 340 (Topic 26). Explores the evolution of American popular culture and its relationship to national consolidation, and at times, disunion, over the last 330 years.

**Topic 36: Exiles, Expatriates, and Political Pilgrims.** Explores the ways in which foreign experiences formed and re-formed individuals' perspectives on the United States, the nature of their social critiques of the U.S., and Americans' experiences of other nations.

Topic 37: The Politics of Creativity. Interdisciplinary investigation of artists in American society and of the intersection of art and politics. Topic 38: Property in American Culture. African and African Diaspora Studies 372C (Topic 3: Property in American Culture). Explores American conceptions of property over a wide range of economic transformations from the mercantile to the digital age, with special attention to the ambiguous and tension-filled meanings of property for women, African Americans, and Native Americans. Only one of the following may be counted: African and African Diaspora Studies 372C (Topic 3), 374D (Topic: Property in American Culture), American Studies 370 (Topic: Property in American Culture), 370 (Topic 38). Topic 39: Radical Latinos. Mexican American Studies 374 (Topic 32: Radical Latinos). Examines the social positioning and history of Latinas/os in the United States. Analyzes the histories of Latinas/ os who have gone against mainstream expectations, or who have challenged or critiqued the status quo in provocative and unexpected ways. Only one of the following may be counted: American Studies 370 (Topic Radical Latinos), 370 (Topic 39), Mexican American Studies 374 (Topic: Radical Latinos), 374 (Topic 32).

**Topic 40: Southern Cultures.** Women's and Gender Studies 345 (Topic 27: Southern Cultures). Investigation of multiple, fluid, and diverse southern cultures through topics such as NASCAR, biscuits and cornbread, mega-churches, beauty pageants, jazz, country music, southern hip hop, migrant farm cultures, matzo ball soup with collards, the Trail of Tears, Gullah, Tara, Graceland, and more. Includes discussion of stereotypes and the individual truths about women, men, and southern in the context of this discussion.

**Topic 41: Vienna: Memory and the City.** Same as European Studies 346 (Topic 5), History 362G (Topic 2), and Urban Studies 354 (Topic 7). Examines the ways in which cultural memory has shaped, and continues to shape, urban life in Vienna, Austria. Only one of the following may be counted: American Studies 315 (Topic: Vienna: Memory and the City), 370 (Topic 41), European Studies 306 (Topic: Vienna: Memory and the City), 346 (Topic 5), Geography 309 (Topic: Vienna: Memory and the City), Germanic Civilization 311 (Topic: Vienna: Memory and the City), History 306N (Topic: Vienna: Memory and the City), Jistory 306N (Topic: Vienna: Memory and the City), 354 (Topic 7). Additional prerequisite: Upperdivision standing.

**Topic 42: Black Political Thought.** Same as African and African Diaspora Studies 372C (Topic 14). Exploration of black social and political thinkers, writers, and reformers, and how their works influence the legacies of slavery, empire, and patriarchy within the United States. Only one of the following may be counted: African and African Diaspora Studies 372C (Topic: Black Political Thought), 372C (Topic 14), American Studies 370 (Topic: Black Political Thought), 370 (Topic 42).

Topic 43: Literature of Black Politics. Same as African and African Diaspora Studies 374F (Topic 21). Examines the novels, plays, and critical essays of Ralph Ellison, James Baldwin, and Toni Morrison as works of democratic political theorizing and political engagement. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Literature of Black Politics), 374F (Topic 21), American Studies 370 (Topic: Literature of Black Politics), 370 (Topic 43), Core Texts and Ideas 345 (Topic: Literature of Black Politics), Western Civilization 320 (Topic: Literature of Black Politics). Topic 44: The Tragicomedy of American Democracy. Same as African and African Diaspora Studies 372F (Topic 15) and Core Texts and Ideas 326 (Topic 2). Examines the foundational ideas and practices essential to the unfolding of American democracy by focusing on founding documents, public speeches, major political conflicts, and canonical texts of political philosophy. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: Tragicomedy of American Democracy), 372F (Topic 15), American Studies 370 (Topic: Tragicomedy of American Democracy), 370 (Topic 44), Core Texts and Ideas 326 (Topic: Tragicomedy of American Democracy), 326 (Topic 2), Western Civilization 320 (Topic: Tragicomedy of American Democracy).

**Topic 45: Feminist Interventions in Borderlands History.** Same as Mexican American Studies 374 (Topic 38) and Women's and Gender Studies 340 (Topic 45). Provides an in-depth understanding of the social, economic, and spatial transformations of the United States/ Mexico borderlands in the nineteenth and early twentieth centuries. Only one of the following may be counted: American Studies 370 (Topic: Feminist Interventions in Borderlands History), 370 (Topic 45), Mexican American Studies 374 (Topic: Feminist Interventions in Borderlands History), 374 (Topic 38), Women's and Gender Studies 340 (Topic: Feminist Interventions in Borderlands History), 340 (Topic 45).

**Topic 46: Latina/o Pop.** Same as Mexican American Studies 374 (Topic 39). Examines how Latinas/os have been a major force in

the production of popular culture. Only one of the following may be counted: American Studies 370 (Topic: Latina/o Pop), 370 (Topic 46), Mexican American Studies 374 (Topic: Latina/o Pop), 374 (Topic 39). Topic 47: Language, Culture, and the Texas German Experience. Same as Anthropology 324L (Topic 55), German, Scandinavian, and Dutch Studies 351C, and Linguistics 373 (Topic 10). The evolution of the culture and language of German immigrants to Texas from the 1840s through the present and how they have influenced other ethnic groups in Texas. Three lectures a week for one semester. Only one of the following may be counted: American Studies 370 (Topic: Language, Culture, and the Texas German Experience), 370 (Topic 47), Anthropology 324L (Topic: Language, Culture, and the Texas German Experience), 324L (Topic 55), Germanic Civilization 327E (Topic 11) German, Scandinavian, and Dutch Studies 351C, Linguistics 350 (Topic: Language, Culture, and the Texas German Experience), 373 (Topic 10). Additional prerequisite: Upper-division standing. Topic 48: Race and Citizenship in United States History. Same as History 350R (Topic 25) and Mexican American Studies 374 (Topic 35). Uses primary and secondary sources to analyze how race and citizenship have functioned for populations of color in the United States. Only one of the following may be counted: American Studies 370 (Topic: Race and Citizenship in United States History), 370 (Topic 48), History 350R (Topic: Race and Citizenship in United States History), 350R (Topic 25), Mexican American Studies 374 (Topic: Race

and Citizenship in United States History), 374 (Topic 35). **Topic 49: Twentieth-Century United States Lesbian and Gay History.** Same as History 365G (Topic 10) and Women's and Gender Studies 335 (Topic 18). Examines classic texts and recent and varied writings on LGBT history, focused on experiences, ideas, and conflicts that have shaped modern LGBT identities. Only one of the following may be counted: American Studies 370 (Topic: United States Lesbian and Gay History, Twentieth Century), 370 (Topic 49), History 365G (Topic: United States Lesbian and Gay History, Twentieth Century), 365G (Topic 10), Women's and Gender Studies 335 (Topic 18), 340 (Topic: United States Lesbian and Gay History, Twentieth Century).

Topic 50: Sexual Deviance in the Twentieth-Century United States. Same as Women's and Gender Studies 335 (Topic 4). Examines the ways that Americans have created and maintained hierarchies of power by casting certain people and sexual behaviors as unnatural and immoral since the turn of the twentieth century. Only one of the following may be counted: American Studies 370 (Topic: Sexual Deviance in the Twentieth-Century US), 370 (Topic 50), Women's and Gender Studies 335 (Topic: Sexual Deviance in the Twentieth-Century US), 335 (Topic 4). Additional prerequisite: Upper-division standing. Topic 51: Queer Study in Low Culture. Same as Women's and Gender Studies 335 (Topic 7). Examines representations of sexual and gender non-conformity in popular culture since the mid-twentieth century in the United States. Only one of the following may be counted: American Studies 370 (Topic: Queer Study in Low Culture), 370 (Topic 51), Women's and Gender Studies 335 (Topic: Queer Study in Low Culture), 335 (Topic 7). Additional prerequisite: Upper-division standing.

**Topic 52:** Movements for Sexual and Reproductive Justice. Same as Women's and Gender Studies 335 (Topic 9). Charts the historical development of various struggles for sexual and reproductive justice in the United States since the nineteenth century. Only one of the following may be counted: American Studies 370 (Topic: Movements for Sexual and Reproductive Justice), 370 (Topic 52), Women's and Gender Studies 335 (Topic: Movements for Sexual and Reproductive Justice), 335 (Topic 9).

**Topic 53: Key Works in American Popular Music.** Examines individual songs as a means to understand larger trends in U.S. cultural history (including various Civil Rights movements, de-industrialization and economic dislocation, cultural polarization, anti-war movements and the backlash, etc.) with an emphasis on rock, pop, punk, rap, disco,

and country music in the U.S. since 1945. Explores popular song through the lens of cultural studies, sociology, and history. American Studies 370 (Topic: Key Works in American Popular Music) and 370 (Topic 53) may not both be counted.

### AMS 372. Conference Course.

Supervised individual study of selected subjects in American studies. Conference course. May be repeated for credit. Prerequisite: Upperdivision standing and consent of instructor.

### AMS 679H. Honors Tutorial Course.

Individual readings and conferences in connection with an original research paper. Conference course for two semesters. Prerequisite: For 679HA, upper-division standing and admission to the American Studies Honors Program; for 679HB, American Studies 679HA.

## **Department of Anthropology**

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

## Anthropology: ANT

### **Lower-Division Courses**

### ANT 301 (TCCN: ANTH 2301). Biological Anthropology.

Introduction to the principles and the methods of biological (physical) anthropology. Overview of the study of human beings in an evolutionary context, our relationship to other primates, and to the rest of the natural world. Examines anatomical, behavioral, and genetic similarities and differences among living primates and basic mechanisms of the evolutionary process. The equivalent of three lecture hours a week for one semester.

### ANT 302 (TCCN: ANTH 2351). Cultural Anthropology.

The concept of culture; social and political organization; language; the supernatural; elementary cultural theory. Three lecture hours a week or two lecture hours and one discussion hour a week for one semester.

## ANT 304 (TCCN: ANTH 2302). Introduction to Archaeological Studies: Prehistoric Archaeology.

Anthropological study of prehistory, from human beginnings to the appearance of written records. Three lecture hours or two lecture hours and one discussion hour a week for one semester.

### ANT 304T. Introduction to Texas Archaeology.

Introduces students to Texas archaeology through lectures, interactive virtual labs, and hands-on laboratory sections that emphasize experimentation. The equivalent of three lecture hours or two lecture hours and two laboratory hours a week for one semester.

### ANT 305. Expressive Culture.

How cultural assumptions affect how we tell and respond to different kinds of stories, including fairy tales, movies, and televised news. Three lecture hours or two lecture hours and one discussion hour a week for one semester.

### ANT 307. Culture and Communication.

Same as Linguistics 312C. An introduction to the study of culture through communication and the theory of signs. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only

one of the following may be counted: Anthropology 307, Linguistics 312 (Topic: Culture and Communication), 312C.

### ANT 310C. Primate Cognition.

Introduction to non-human primate knowledge of the physical world, as well as primate social knowledge. Examines non-human primate cognition within an evolutionary and comparative framework, with emphasis placed on comparing and contrasting non-human primate cognition with that of humans and other taxonomic groups. Three lecture hours a week for one semester. Anthropology 310C and 310L (Topic: Primate Cognition) may not both be counted.

### ANT 310D. Introduction to Black Studies.

Same as African and African Diaspora Studies 303. Introduction to canonical black studies literature, themes, and theories. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 303, Anthropology 310D, 310L (Topic: Intro to African and African Diaspora Studies).

### ANT 310L. Introductory Topics in Anthropology.

Three lecture hours or two lecture hours and one discussion hour a week for one semester. May be repeated for credit when the topics vary.

**Topic 2: Anthropology of Race and Ethnicity: An Introduction.** Same as American Studies 315D and African and African Diaspora Studies 317D (Topic 2: Anthropology of Race and Ethnicity: An Introduction). Examines the social importance of race and ethnicity both in America and around the world. Only one of the following may be counted: African and African Diaspora Studies 317D (Topic 2) and American Studies 315 (Topic: Anthropology of Race and Ethnicity), 315D, Anthropology 310L (Topic 2).

**Topic 3: Anthropology of Latin America.** Same as Latin American Studies 315 (Topic 1). Provides a framework for understanding contemporary concerns in Latin America. Only one of the following may be counted: Anthropology 310L (Topic 3), Latin American Studies 310 (Topic 4), 315 (Topic 1).

**Topic 5: Introduction to South Asia.** Same as Asian Studies 302K. Introduction to Indian and south Asian civilization, past and present, including religion, literature, arts, philosophy, and history. Only one of the following may be counted: Anthropology 310L (Topic 5), Asian Studies 302K, History 306N (Topic: Introduction to India).

**Topic 6: Black Queer Art Worlds.** Same as African and African Diaspora Studies 317E (Topic 1) and Women's and Gender Studies 301 (Topic 17). Exploration of over two decades of work produced by and about black queer subjects throughout the circum-Atlantic world. Provides an introduction to various artists and intellectuals of the black queer diaspora, as well as an examination of the viability of black queer aesthetic practice as a form of theorizing. Only one of the following may be counted: African and African Diaspora Studies 317E (Topic: Black Queer Diaspora Aesthetics), 317E (Topic 1), Anthropology 310L (Topic: Black Queer Diaspora Aesthetics), 310L (Topic 6), Women's and Gender Studies 301 (Topic: Black Queer Diaspora Aesthetics), 301 (Topic 17).

**Topic 7: Diaspora: Race, Nation, and Resistance.** Same as African and African Diaspora Studies 317E (Topic 2). Subjects include makings and meanings of diaspora, the differences and similarities between diaspora and related concepts such as race, nation, and cultural identity. Focuses on the making of the black Atlantic world, and comparative analysis between black diasporic life and that of other global dispersals, particularly among Asian and indigenous populations, and how resistance serves as a key link. Only one of the following may be counted: African and African Diaspora Studies 317E (Topic: Diaspora: Race/Nation/Resistance), 317E (Topic 2), Anthropology 310L (Topic: Diaspora: Race/Nation/Resistance), 310L (Topic 7), Asian American Studies 310 (Topic: Diaspora: Race/Nation/ Resistance).

**Topic 9: Aztecs and Spaniards.** Focus on how imperial expansion affected the daily life of people in the Aztec empire after the Spanish conquest. Examines the daily life of different people in the Aztec empire and the themes of human sacrifice, conquest, warfare, and religion. Explores social and cultural heterogeneity in both of these empires, in order to familiarize students with the diverse lines of evidence available to study these empires, and to understand processes of historical change among the Aztecs and the Spanish empire. Only one of the following may be counted: Anthropology 310L (Topic: Aztecs and Spaniards), 310L (Topic 9), Latin American Studies 315 (Topic: Aztecs and Spaniards).

### ANT 314C. Introduction to Mesoamerican Archaeology.

Same as Latin American Studies 315 (Topic 2). Introduction to ancient Mesoamerica from the time of emerging social inequality in the formative period until the Spanish conquest of Mexico-Tenochtitlan in the sixteenth century. Only one of the following may be counted: Anthropology 310L (Topic 1: Introduction to Mesoamerican Archaeology), 314C, Latin American Studies 310 (Topic 3: Introduction to Mesoamerican Archaeology), 315 (Topic 2).

### ANT 318L. Mexican American Culture.

Same as Mexican American Studies 318. Mexican American cultural distinctiveness in the areas of social organization, child rearing, food culture, folklore, language, and religion. Three lecture hours a week for one semester.

### ANT 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Anthropology.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Anthropology. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

### ANT 320L. Topics in Language, Culture, and Communication.

Relationship of language to culture and society, and of folk classifications to principles of social organization and cognition. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 3: Ethnography of Communication.** History and overview of the ethnography of communication with a focus on theoretical and methodological issues. Prerequisite: Anthropology 302. **Topic 4: American Indian Languages and Cultures.** Prerequisite:

Anthropology 302.

**Topic 5: Speech Play and Verbal Art.** Prerequisite: Anthropology 302. **Topic 9: The German Language: Historical Perspectives.** Same as German 369 (Topic 4) and Linguistics 373 (Topic 9). Only one of the following may be counted: Anthropology 320L (Topic 8: German and English: Historical Perspectives), 320L (Topic 9), Classical Civilization 348 (Topic 8: German and English: Historical Perspectives), 348 (Topic 9: The German Language: Historical Perspectives), German 369 (Topic 4), Germanic Civilization 327E (Topic 9: German and English: Historical Perspectives), Linguistics 373 (Topic 8: German and English: Historical Perspectives), 373 (Topic 9). Additional prerequisite: Three semester hours of upper-division coursework in German or Linguistics.

**Topic 11: Politics, Polity, and the Power of Words.** Examines the place of language in a variety of different political settings--from oblique

oratory in small-scale egalitarian communities to ritual "poetry" in cosmic polities to procedural prose in mass bureaucratic states--to come to a better understanding of the power of words. Working with a broad understanding of politics, look at the varied ways language sustains and transforms power relations in different political contexts, and thereby takes on a power of its own. Explore a variety of political situations, different modes of political communication, as well as different theories of the "performative" power of words. Anthropology 320L (Topic: Polit/Polity/Power of Words) and 320L (Topic 11) may not both be counted Additional prerequisite: Upper-division standing. Topic 12: Invented Languages. Examines the different ways that linguists, hobbyists, or philosophers have understood language as "natural" rather than "man-made" phenomenon and how these debates have had effects on projects of linguistic planning, reform, or invention. Particular attention to the 19th and 20th centuries when European colonialism altered and exacerbated guestions of univeralisms, human communication, and radical social change that became central to projects of language invention. Anthropology 320L (Topic: Invented Languages) and 320L (Topic 12) may not both be counted. Additional prerequisite: Upper-division standing. Topic 13: Endangered Languages. Same as Linguistics 373 (Topic 12). Examines campaigns to preserve and revitalize dying languages and explores views of language that underpin the anxieties and efforts of the language rights and revitalization movements. Only one of the following may be counted: Anthropology 320L (Topic: LANG ENDANGERMENT/RIGHTS), 320L (Topic 13), Linguistics 373 (Topic: LANG ENDANGERMENT/RIGHTS), 373 (Topic 12) Additional prerequisite: Upper-division standing.

**Topic 14: Talk, Text, and God.** Introduction to the anthropological study of Christianity, particularly in colonial and post-colonial settings. Only one of the following may be counted: Anthropology 320L (Topic: Talk, Text, and God), 320L (Topic 14), Religious Studies 373 (Topic: Talk, Text, and God). Additional prerequisite: Upper-division standing.

### ANT 322M. Topics in Cultures of the World.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 3: Native American Cultures of the Greater Southwest. Same as American Studies 321 (Topic 1: Native American Cultures of the Greater Southwest). Prerequisite: Upper-division standing. Topic 10: Mexican American Indigenous Heritage. Same as Mexican American Studies 374 (Topic 23: Mexican American Indigenous Heritage). The prehistory, history, and contemporary racial understanding of Mexican Americans. Prerequisite: Upper-division standing.

**Topic 12: Mexican Immigration Cultural History.** Same as Latin American Studies 324L (Topic 16). Examines the history of Mexican immigration to the United States, and provides an overview of migratory patterns dating back to the late prehistoric period through contemporary times. Only one of the following may be counted: Anthropology 310L (Topic: Mexican Immigration Cultural History), 322M (Topic 12), Latin American Studies 310 (Topic: Mexican Immigration Cultural History), 324L (Topic 16), Mexican American Studies 319 (Topic: Mexican Immigration Cultural History).

### ANT 324C. Science, Magic, and Religion.

Same as Religious Studies 373L. Historical and cross-cultural overview of the constructed concepts of magic, science, and religion through comparative examinations of cultural contexts from the Islamic world, western Europe, the Caribbean, the U.S., and Mozambique. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 372G (Topic: Science, Magic, and Religion), American Studies 327 (Topic: Science, Magic, Religion), Anthropology 324L (Topic: Science, Magic, & Religion), 324C, Religious Studies 373 (Topic: Science, Magic, & Religion), 373 (Topic 6), 373L. Prerequisite: Upper-division standing.

### ANT 324L. Topics in Anthropology.

Three lecture hours a week for one semester. Some topics partially fulfill legislative requirement for American history. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 3: Primitive Technology.** Prerequisite: Upper-division standing. **Topic 4: Development And Its Critics.** Same as Asian Studies 361 (Topic 49). Only one of the following may be counted: Anthropology 324L (Topic: Development And Its Critics), 324L (Topic 4), Asian Studies 361 (Topic: Development And Its Critics), 361 (Topic 49). Additional prerequisite: Upper-division standing.

**Topic 7: Introduction to African Prehistory.** Same as African and African Diaspora Studies 322. Prerequisite: Upper-division standing. **Topic 8: Cultures of Southeast Asia.** Same as Asian Studies 361 (Topic 5: Cultures of Southeast Asia). Comparative study of the peoples of Indonesia, Burma, Thailand, Malaysia, and other countries. Additional prerequisite: Upper-division standing.

**Topic 9: The African Diaspora in the Americas.** Same as African and African Diaspora Studies 321. Black cultures and societies in the New World, and their African heritage. Prerequisite: Upper-division standing.

**Topic 13: Musics of India.** Same as Asian Studies 361 (Topic 11: Musics of India) and Music 342 (Topic 3: Musics of India). Prerequisite: Upper-division standing.

**Topic 17: Nature, Society, and Adaptation.** Same as Geography 331K. Long term trajectories of change in human environment relationships, including issues of human evolution and human nature, violence, population, food, agriculture, urbanization, globalizing modernization, and environmental impacts; issues of sustainability, cultural survival, human rights, and environmental protection. Three lecture hours a week for one semester. Additional prerequisite: Upper-division standing.

Topic 20: Sexuality in Global Perspective. Explores the ways in which sexuality intersects with money, intimacy, desire, power, labor, health, race, consumption, and social justice, all in the context of global economic processes. Only one of the following may be counted: Anthropology 324L (Topic: Sexuality in Global Perspective), 324L (Topic 20), Women's and Gender Studies 335 (Topic: Sexuality in Global Perspective). Additional prerequisite: Upper-division standing. Topic 23: History of Hindu Religious Traditions. Same as Asian Studies 340 (Topic 4: History of Hindu Religious Traditions), History 364G (Topic 1: History of Hindu Religious Traditions), and Religious Studies 321. History of major doctrines, practices, and institutions that shaped the development of Hinduism; how religions adapt to social and cultural change and often provide the catalyst for change. Prerequisite: Upper-division standing.

**Topic 24: Archaeology of African Thought.** Same as African and African Diaspora Studies 372G (Topic 3). Archaeological, historical, and ethnographic data as they relate to the foundations of contemporary African and African American societies. African and African Diaspora 372G (Topic 3) and Anthropology 324L (Topic 24) may not both be counted.

**Topic 26: Race and Sport in African American Life.** Same as African and African Diaspora Studies 372E (Topic 19) and Kinesiology 352K (Topic 6). Only one of the following may be counted: African and African Diaspora Studies 372E (Topic 19), 374 (Topic 27), Anthropology 324L (Topic 26), Kinesiology 352K (Topic 6) Additional prerequisite: Upper-division standing.

**Topic 29: Sacred and Ceremonial Textiles.** Same as Islamic Studies 372 (Topic 11), Middle Eastern Languages and Cultures 321 (Topic 34), Religious Studies 358 (Topic 11), and Women's and Gender Studies 340 (Topic 57). Textiles and material objects indigenous

to the Islamic world, and what they reveal about the culture of various Islamic societies. Only one of the following may be counted: Anthropology 324L (Topic 29), Islamic Studies 372 (Topic 11), Middle Eastern Languages and Cultures 321 (Topic: Sacred and Ceremonial Textiles), 321 (Topic 34), Middle Eastern Studies 328 (Topic: Sacred and Ceremonial Textiles), Religious Studies 358 (Topic: Sacred and Ceremonial Textiles), 358 (Topic 11), Textiles and Apparel 355 (Topic: Sacred and Ceremonial Textiles), Women's and Gender Studies 340 (Topic: Sacred and Ceremonial Textiles), 340 (Topic 57).

Topic 33: Geographical Information Systems and Remote Sensing for Archaeology and Paleontology. Same as Geography 356T (Topic 3: Geographical Information Systems and Remote Sensing for Archaeology and Paleontology). Designed to give students interested in the fields of archaeology, physical anthropology, and paleontology a foundation in the use of geographical information systems (GIS) and the analysis of remotely sensed data from satellites and aerial photographs. Additional prerequisite: Upper-division standing. Topic 37: The Politics of Race and Violence in Brazil. Same as African and African Diaspora Studies 374E (Topic 2: The Politics of Race and Violence in Brazil) and Latin American Studies 324L (Topic 14: The Politics of Race and Violence in Brazil). Prerequisite: Upper-division standing.

**Topic 38: Race and the Criminal Justice System.** Same as African and African Diaspora Studies 372F (Topic 10). Examines historical and contemporary studies that provide arguments about the connections between race, poverty, and the criminal justice system. Subjects include how and why acts of police violence, questionable court proceedings, and unjust sentences routinely take place, and how and why they are often sanctioned by institutional practices and society at large. Only one of the following may be counted: African and African Diaspora Studies 320 (Topic 3), 372F (Topic 10), Anthropology 324L (Topic 38).

**Topic 39: Theories of Archaeology.** The history of archaeological thought, including the major theoretical trends that have shaped the discipline over time.

**Topic 40: Gender, Sexuality, and the Family in Indian Religions and Cultures.** Same as Asian Studies 372 (Topic 25: Gender, Sexuality, and the Family in Indian Religions and Cultures), Religious Studies 341 (Topic 3: Gender, Sexuality, and the Family in Indian Religions and Cultures), and Women's and Gender Studies 340 (Topic 25: Gender, Sexuality, and the Family in Indian Religions and Cultures). A comprehensive historical overview of gender issues as they are represented in the textual traditions of South Asia.

**Topic 41: Science, Technology, and Race.** Examines the intersections and linkages between race, science, and technology. Review of the array of current anthropological and sociological studies of science, which regard science as an institutionalized set of cultural practices charged with generating objective knowledge of the world. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: Science, Technology, and Race), Anthropology 324L (Topic: Science, Technology, and Race), 324L (Topic 41).

**Topic 42: United States Latino and Latina Ethnographies.** Same as Mexican American Studies 374 (Topic 33). Explores past and present anthropological representations of Latinos and Latinas in the United States. Only one of the following may be counted: Anthropology 324L (Topic: U.S. Latino/a Ethnographies), 324L (Topic 42), Mexican American Studies 374 (Topic: U.S. Latino/a Ethnographies), 374 (Topic 33).

**Topic 43: Creative Nonfiction and Ethnography.** Explores the convergences and divergences between ethnographic and narrative journalistic writing, and their potential for producing powerful, richly textured accounts that capture the depth of human experience and the complexity of social life. Anthropology 324L (Topic: Creative Nonfiction and Ethnography) and 324L (Topic 43) may not both be counted.

**Topic 44: Ethnographic Theory and Practice.** An exploration of the complex relationship between anthropological ideas and ethnographic practice. Introduces a broad spectrum of concepts, issues, and theories of culture, and critically examines how these theories and ideas shape anthropological methods and writings. Anthropology 324L (Topic: Ethnographic Theory and Practice) and 324L (Topic 44) may not both be counted.

**Topic 45: Queer Ethnographies.** Same as Women's and Gender Studies 340 (Topic 58). Anthropological analysis of gender and sexuality that critically evaluates formative concepts and theories that have been subject to recent debates within anthropology, gender studies, and queer theory. Only one of the following may be counted: Anthropology 324L (Topic: Queer Ethnographies), 324L (Topic 45), Women's and Gender Studies 340 (Topic: Queer Ethnographies), 340 (Topic 58).

Topic 46: Urban Unrest. Same as Asian American Studies 330 (Topic 6), African and African Diaspora Studies 372F (Topic 13), American Studies 321 (Topic 8), and Urban Studies 354 (Topic 14). Analysis of the roots of urban unrest, exploring a range of origins: joblessness, state violence, white flight, backlash against civil rights gains, new immigration, and interracial strife. Beyond race and class, subjects include exploring unrest as a mode of pushing the normative boundaries of gender and sexuality in public space. Course material will draw from film, literature, history, geography, and anthropology. Only one of the following may be counted: African and African Diaspora Studies 372F (Topic: Urban Unrest), 372F (Topic 13), 374D (Topic: Urban Unrest), American Studies 321 (Topic: Urban Unrest), 321 (Topic 8), Anthropology 324L (Topic: Urban Unrest), 324L (Topic 46), Asian American Studies 330 (Topic: Urban Unrest), 330 (Topic 6), Urban Studies 354 (Topic: Urban Unrest), 354 (Topic 14). Topic 47: Afro-Caribbean Politics and Culture in Central America. Same as African and African Diaspora Studies 326, Latin American Studies 337N, and Women's and Gender Studies 340 (Topic 38). Exploration of black identity, political systems, and community activism in Central America and the Caribbean. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 326, 374E (Topic: Afro-Caribbean Politics and Culture in Central America), Anthropology 324L (Topic: Afro-Caribbean Politics and Culture in Central America), 324L (Topic: 47), Government 365N (Topic: Afro-Caribbean Politics and Culture in Central America), Latin American Studies 337M (Topic: Afro-Caribbean Politics and Culture in Central America), 337N, Women's and Gender Studies 340 (Topic: Afro-Caribbean Politics and Culture in Central America), 340 (Topic 38). Prerequisite: Upper-division standing. Topic 48: Sex and Power in the African Diaspora. Same as African and African Diaspora Studies 372G (Topic 33) and Women's and Gender Studies 340 (Topic 52). Exploration of various experiences and theories of sex, intimacy, and desire alongside intellectual and artistic engagements with power hierarchies and spirituality across transnational black communities. Subjects include the concept of "erotic subjectivity" from various theoretical and methodological angles, principally within African diasporic contexts. Only one of the following may be counted: African and African Diaspora Studies 372G (Topic: Sex and Power in the African Diaspora), 372G (Topic 33), Anthropology 324L (Topic: Sex and Power in the African Diaspora), 324L (Topic 48), Women's and Gender Studies 340 (Topic: Sex and Power in the African Diaspora), 340 (Topic 52).

**Topic 49: Global Markets and Local Cultures.** Same as Asian Studies 361 (Topic 31). Examines contemporary theories of globalization, including materials exploring global governance, international monetary policy, migration regulation, offshoring, and cultural hybridity. Focuses on case studies in Asia and elsewhere that reveal how these practices impact particular communities. Only one of the following may be counted: Anthropology 324L (Topic: Global Markets and Local Cultures), 324L (Topic 49), Asian Studies 361 (Topic 31), 372

(Topic: Global Markets and Local Cultures), 372 (Topic 26). Additional prerequisite: Upper-division standing.

**Topic 51: The Cities of the Middle East.** Same as Islamic Studies 373 (Topic 9), Middle Eastern Studies 341 (Topic 3), and Urban Studies 354 (Topic 15). Anthropological and sociological analysis of space, with a special emphasis on urban theory and culture in the Middle East. Only one of the following may be counted: Anthropology 324L (Topic: Cities of the Middle East), 324L (Topic 51), Islamic Studies 373 (Topic: Cities of the Middle East), 373 (Topic 9), Middle Eastern Studies 322K (Topic: Cities of the Middle East), 341 (Topic 3), Urban Studies 354 (Topic: Cities of the Middle East), 354 (Topic 15).

**Topic 53: Global Indigenous Issues.** Same as Latin American Studies 324L (Topic 15). Explores contemporary issues of indigenous peoples around the world through films, literature, and social science readings and focuses on how indigenous peoples are actively working to oppose their oppression and create sustainable futures. Only one of the following may be counted: Anthropology 324L (Topic: Global Indigenous Issues), 324L (Topic 53), Latin American Studies 324L (Topic: Global Indigenous Issues) 324L (Topic 15).

**Topic 54: Black Native American Relations in the United States.** Explores the entwined histories, cultures, and identities of African American and Native American people in North America. Subjects include experiences of racial formation, including how race, power, and indigeneity work in different ways for people in contemporary United States society. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: Black Native Relations in the U.S.), American Studies 321 (Topic: Black Native Relations in the U.S.), Anthropology 324L (Topic: Black Native Relations in the U.S.), Anthropology 324L (Topic 54).

Topic 55: Language, Culture, and the Texas German Experience. Same as American Studies 370 (Topic 47), German, Scandinavian, and Dutch Studies 351C, and Linguistics 373 (Topic 10). The evolution of the culture and language of German immigrants to Texas from the 1840s through the present and how they have influenced other ethnic groups in Texas. Three lectures a week for one semester. Only one of the following may be counted: American Studies 370 (Topic: Language, Culture, and the Texas German Experience), 370 (Topic 47), Anthropology 324L (Topic: Language, Culture, and the Texas German Experience), 324L (Topic 55), Germanic Civilization 327E (Topic 11) German, Scandinavian, and Dutch Studies 351C, Linguistics 350 (Topic: Language, Culture, and the Texas German Experience), 373 (Topic 10). Additional prerequisite: Upper-division standing. Topic 56: Ethnographic Writing. Writing workshop consisting of a series of exercises to add density and texture to ethnographic description by including attention to scene, character, event, situation, and dialogue. Only one of the following may be counted: Anthropology 324L (Topic: Ethnographic Writing), 324L (Topic: Writing Ethnography), 324L (Topic 56). Additional prerequisite: Upper-division standing. Topic 57: Archaeology of Climate Change. Examines why climate changes, the methods for recording climate change, and includes case studies of the varied responses of past human societies to climate change in different geographic regions and time periods with varying socio-political and economic systems. Only one of the following may be counted: Anthropology 324L (Topic: Archaeology of Climate Change), 324L (Topic 57), Geography 356 (Topic: Archaeology of Climate Change). Additional prerequisite: Upper-division standing. Topic 58: Digital Data Systems in Archaeology. Designed to help students understand the basic knowledge and skills needed to operate digital equipment (e.g. GPS and Total Data Stations) commonly used for collecting location data on archaeological sites. Instruction on mapping and grid systems translates into "hands-on" instrument operation in simulated archaeological field conditions. Provides an introduction to GIS software and its applications in archaeology as well as an overview of near-surface sensing techniques. Anthropology 324L (Topic: Digital Data Systems

in Archaeology) and 324L (Topic 58) may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 59: Graffiti and Poster Art in the Islamic World.** Same as Islamic Studies 373 (Topic 17), Middle Eastern Languages and Cultures 321 (Topic 36), Middle Eastern Studies 342 (Topic 44), Religious Studies 358 (Topic 21), and Women's and Gender Studies 340 (Topic 67). Only one of the following may be counted: Anthropology 324L (Topic: Graffiti/Poster Art: Islam World), 324L (Topic 59), Islamic Studies 373 (Topic: Graffiti/Poster Art: Islam World), 373 (Topic 17), Middle Eastern Languages and Cultures 321 (Topic: Graffiti/Poster Art: Islam World), 373 (Topic: Graffiti/Poster Art: Islam World), 373 (Topic: Graffiti/Poster Art: Islam World), 321 (Topic 36), Middle Eastern Studies 342 (Topic: Graffiti/Poster Art: Islam World), 342 (Topic 44), Religious Studies 358 (Topic: Graffiti/Poster Art: Islam World), 358 (Topic 21), Women's and Gender Studies 340 (Topic: Graffiti/Poster Art: Islam World), 340 (Topic 67). Prerequisite: Upper-division standing.

**Topic 63: Food and Culture.** Examines cultural and linguistic views on eating and how we talk about what we eat in the contemporary era. Combines scholarly literature, videos, and readings about food subjects that circulate in popular culture, and considers how flows of dietary images and discourses shape race/ethnicity, gender, social class, and other identifications. Anthropology 324L (Topic: Food and Culture) and 324L (Topic 63) may not both be counted. Prerequisite: Upper-division standing.

**Topic 64: The Bronze Age and the Iron Age in Atlantic Europe.** Introduction to the archaeology of Atlantic Europe with particular emphasis on the Bronze Age and Iron Age periods. Examines the diversity and commonalities of European adaptations, investigates how geography influenced trade of goods and ideas, as well as the profound changes brought about by a new conceptualization of the world and the innovations of the Bronze and Iron Ages. Anthropology 324L (Topic: Bronze Age and Iron Age Atlantic Europe) and 324L (Topic 64) may not both be counted. Prerequisite: Upper-division standing.

**Topic 65: Anthropology for Liberation.** Same as African and African Diaspora Studies 372C (Topic 8). Takes a critical look at anthropologists' quests to shifting the legacy of anthropology from the colonial toward freedom and liberation. Explores anthropology's relationship to human rights, violence, questions of race, gender, and sexuality, imperialism and neoliberalism, and the ways that some anthropologists have chosen to use their field work in new and different ways. Only one of the following may be counted: African and African Diaspora Studies 372C (Topic: Anthropology for Liberation), 372C (Topic 8), Anthropology 324L (Topic: Anthropology for Liberation), 324L (Topic 65), Women's and Gender Studies 340 (Topic: Anthropology for Liberation). Additional prerequisite: Upperdivision standing.

**Topic 66: Indigenizing Queer Theory.** Introduction to emerging work by indigenous queer theorists, largely from the United States. Examines cultural conflicts between the west and indigenous world views and practices surrounding monogamy and marriage, same-sex marriage, enforced gender binaries, sexual identities and practices, their regulation by the colonial state, and implications for indigenous people. Only one of the following may be counted: Anthropology 324L (Topic: Indigenizing Queer Theory), 324L (Topic 66), Women and Gender Studies 335 (Topic: Indigenizing Queer Theory). Prerequisite: Upper-division standing.

Topic 68: Creation and Evolution: Human Origins in Scientific and Religious Discourses. Same as Religious Studies 373 (Topic 8). Examines evolutionary theory, intelligent design, and creationism, and how they interact. Only one of the following may be counted: Anthropology 324L (Topic: Creation and Evolution in America), 324L (Topic 68), Religious Studies 346 (Topic: Creation and Evolution), 373 (Topic 8). Additional prerequisite: Upper-division standing. Topic 69: Japanese Concepts of Body and Self. Same as Asian Studies 372 (Topic 41) and Religious Studies 352 (Topic 8). Exploration of anthropological literature describing Japanese conceptions of self and body, and analysis of the intersection of these conceptions of self with Japanese ideas about religion, morality, aging, and medicine. Only one of the following may be counted: Anthropology 324L (Topic: Japanese Concepts of Body and Self), 324L (Topic 69), Asian Studies 372 (Topic: Japanese Concepts of Body and Self), 372 (Topic 41), Religious Studies 352 (Topic: Japanese Concepts of Body and Self), 352 (Topic 8).

Topic 71: Extraterrestrial Intelligence: Culture, Religion, and Imagination. Same as Religious Studies 373 (Topic 9). Focusing primarily on the 20th and 21st Centuries, explores the search for extraterrestrial intelligence (SETI) and considers how these ideas have intersected with other aspects of society, particularly religion, including recent arguments that SETI itself has developed into a religion. Examines meanings and motivations behind issues such as Percival Lowell's quest to prove the existence of canals on Mars and the development of Scientology. Only one of the following may be counted: Anthropology 324L (Topic: Sentience, Culture, and Religion: SETI), 324L (Topic 71), Religious Studies 373 (Topic: Sentience, Culture, and Religion: SETI), 373 (Topic 9).

Topic 72: Development, Security, and Society. Explores the linkages between development, security, and, society. Examines a series of recent transformations that have drawn the relationship between international development and various forms of security together. Through an exploration of recent anthropological work, examines subjects such as: human security, the relationship between development and humanitarian intervention, strategies for planning in the face of climate change, disaster management, and new technologies of warfare and security. Anthropology 324L (Topic: Human Securities/Insecurities) and 324L (Topic 72) may not both be counted. Additional prerequisite: Upper-division standing. Topic 73: Political Ecology. Introduction to core tenets of political ecology. Focuses on ethnographic approaches and introduces key debates in the field--such as the relationship between environment and violence, the critique of Malthusian and neo-Malthusian notions of scarcity and limits, the links between conservation and dispossession, and more. Explores the uses of political ecology in key contemporary debates over social and environmental change, from climate change to waste management. Anthropology 324L (Topic: Political Ecology) and 324L (Topic 73) may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 74: Inca World.** Same as Latin American Studies 324L (Topic 18). Explores how Inca civilization developed, how the Incas grew from a small highland state into a mighty empire, and how a small number of Spaniards and their allies were able to bring the Inca dynasty to an end. Read accounts of the Incas written in the first years of Spanish colonial rule, and review the latest archaeological discoveries. Only one of the following may be counted: Anthropology 324L (Topic: Inca World), 324L (Topic 74), Latin American Studies 324L (Topic: Inca World), 324L (Topic 18). Additional prerequisite: Upper-division standing.

**Topic 77: Blacks and Asians: Race and Social Movements.** Same as African and African Diaspora Studies 374D (Topic 19) and Asian American Studies 330 (Topic 3). Examines the relations between Asians and Blacks in the United States. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: Blacks/Asians: Race/Social Movements), 374D (Topic 19), Anthropology 324L (Topic: Blacks/Asians: Race/Social Movements), 324L (Topic 77), Asian American Studies 330 (Topic: Blacks/Asians: Race/Social Movements), 330 (Topic 3). Additional prerequisite: Upper-division standing.

**Topic 78: Black Women and the State**. Same as African and African Diaspora Studies 372F (Topic 12), Latin American Studies 324L (Topic 17), and Women's and Gender Studies 340 (Topic 7). Surveys black women's experiences living with and confronting state oppression

around the world. Takes an historical, social, and theoretical look at the roots of this oppression and inequality, and how black women have chosen to respond to it locally and globally. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 372F (Topic: Black Women, Struggle, and the Transnational State), 372F (Topic 11), 372F (Topic 12), Anthropology 324L (Topic: Black Women, Struggle, and the Transnational State), 324L (Topic 78), Latin American Studies 324L (Topic: Black Women, Struggle, and the Transnational State), 324L (Topic 17), Women's and Gender Studies 340 (Topic: Black Women, Struggle, and the Transnational State), 340 (Topic 7), 340 (Topic 63). Additional prerequisite: Upper-division standing.

### ANT 325J. The Photographic Image.

Applies concepts and practices from visual ethnography to the study of memory, place, and everyday life. Subjects include developing counterintuitive and subversive approaches to practices of looking and techniques of representation. Two lecture hours and two lab hours a week for one semester. Anthropology 325L (Topic: The Photographic Image) and 325J may not both be counted. Prerequisite: Upper-division standing.

## ANT 325L. Cultural Studies, Public Culture, and Folklore: Selected Topics.

Consideration of folklore in different culture areas of the Western Hemisphere. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 11: Cultural Heritage on Display.** Explores the public construction and display of traditional American folk culture by studying popular folklife-oriented tourist sites. American Studies 321 (Topic: Cultural Heritage on Display) and Anthropology 325L (Topic 11) may not both be counted.

**Topic 12: Russian Myths and Folktales.** Same as Comparative Literature 323 (Topic 34) and Russian, East European, and Eurasian Studies 325 (Topic 22). Examination of the Russian folktale, its roots in ancient, pre-Christian Slavic religious tradition, its connections with other forms of folklore such as myth and legend, and its transformation in modern Russian literature. Subjects include the continuing influence of folklore explored through various aspects of Russian culture, including literature, music, ballet, film, and popular culture. Only one of the following may be counted: Anthropology 325L (Topic: Russian Myths and Folk Tales), 325L (Topic 12), Comparative Literature 323 (Topic: Russian Myths and Folk Tales), 330 (Topic 34), Russian 330 (Topic: Russian Myths and Folk Tales), 330 (Topic 9), Russian, East European and Eurasian Studies 325 (Topic: Russian Myths and Folk Tales), 325 (Topic 22). Additional prerequisite: Upperdivision standing.

**Topic 13: Representation of Jews in the American Public Sphere.** Same as Jewish Studies 365 (Topic 11) and Religious Studies 346 (Topic 8). Examines how Jews have been represented and constituted in American public culture as a race, religion, and/or nation through distinct institutions and display practices. Only one of the following may be counted: Anthropology 325L (Topic 13), Jewish Studies 365 (Topic: Representation of Jews in the American Public Sphere), 325L (Topic 13), Jewish Studies 365 (Topic 11), Religious Studies 346 (Topic: Representation of Jews in the American Public Sphere), 346 (Topic: Representation of Jews in the American Public Sphere), 346 (Topic 8).

**Topic 14: Traveling Culture.** Examines mobility as a point of inquiry into questions of identity, community, belonging, place and landscape, art, representation, cultural difference, experience, and history. Only one of the following may be counted: Anthropology 325L (Topic: Traveling Culture), 325L (Topic 14), Russian, East European, and Eurasian Studies 325 (Topic: Traveling Culture).

Topic 15: Practices of Looking. Develops methodological and analytic tools for the examination of visual culture. Anthropology 325L (Topic: Practices of Looking) and 325L (Topic 15) may not both be counted. Topic 16: Cultures and Ecologies. Same as Russian, East European, and Eurasian Studies 345 (Topic 8). Examines the anthropology of "nature" and "natural resources," with particular attention to the communities in the arctic and subarctic regions. Use ethnographies to learn about the cultures of peoples who inhabit northern latitudes, especially their cosmological modes of belief and their ecological ways of life. Only one of the following may be counted: Anthropology 325L (Topic: Cultures and Ecologies), 325L (Topic 16), Russian, East European, and Eurasian Studies 345 (Topic: Cultures and Ecologies), 345 (Topic 8). Additional prerequisite: Upper-division standing. Topic 17: American Jewish Material Culture. Same as Jewish Studies 365 (Topic 12) and Religious Studies 346 (Topic 9). Examines the interplay between material culture and Jewish identity and thought in contemporary America. Only one of the following may be counted: Anthropology 325L (Topic: American Jewish Material Culture), 325L (Topic 17), Jewish Studies 365 (Topic: American Jewish Material Culture), 365 (Topic 12), Religious Studies 346 (Topic: American Jewish Material Culture), 346 (Topic 9).

**Topic 18: Ethnographies of Emotion**. Writing workshop with subjects including place, character, objects, subjects, cultural forms, everyday life, and feeling states or structures such as trauma, love, hope, depression, the even keel, and melodrama. Explores how to articulate structures of feeling with models of culture and the self and examines and experiments with modes of ethnographic attention, the importance of the telling detail and methods of participant observation. Only one of the following may be counted: Anthropology 324L (Topic: Ethnographies of Emotion), 325L (Topic 18). Additional prerequisite: Upper-division standing.

**Topic 19: Cultures of Sustainability.** Examines how ecological concerns are articulated and perceived in different cultural contexts. Anthropology 325L (Topic: Cultures of Sustainability) and 325L (Topic 19) may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 20: Europe Via Ethnography.** Develops a geographical and historical orientation to Europe and introduces the cultural complexity of Europe via an understanding of a premier method for generating social science knowledge--ethnography. Only one of the following may be counted: Anthropology 325L (Topic: Europe via Ethnography), 325L (Topic 20), European Studies 346 (Topic: Europe via Ethnography). Additional prerequisite: Upper-division standing.

### ANT 325M. Language in Culture and Society.

Same as Linguistics 373 (Topic 3: Language in Culture and Society) and Sociology 352M (Topic 4: Language in Culture and Society). Language as a cultural resource; functions of language in society; survey of language communities. Three lecture hours a week for one semester. Prerequisite: Anthropology 302, 305, 307, or Linguistics 306; or consent of instructor.

### ANT 325N. Language and Speech in American Society.

Same as American Studies 321 (Topic 2: Language and Speech in American Society), Linguistics 373 (Topic 2: Language and Speech in American Society), and Sociology 352M (Topic 3: Language and Speech in American Society). Three lecture hours a week for one semester. Prerequisite: Upper-division standing, and Anthropology 302, 305, 307, or Linguistics 306.

### ANT 326C. Native Americans in Texas.

Same as American Studies 321G. Studies the history of Native Americans in Texas using concepts and evidence from anthropology, history, archaeology, historical geography, and Native American studies. Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 321 (Topic: Native Americans in Texas), Anthropology 324L (Topic: Native Americans in Texas), 326C. Prerequisite: Upper-division standing.

### ANT 326D. Native Americans in the Plains.

The ethnohistory of some of the most influential Native American groups on the plains, from the arrival of the Spanish through the reservation period. Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 321 (Topic: Native Americans in the Plains), Anthropology 324L (Topic: Native Americans in the Plains), 326D, History 365G (Topic: Native Americans in the Plains. Prerequisite: Upper-division standing.

### ANT 326E. Plains Archaeology: Prehistory and History.

Explores the evidence of human activities on the central and southern plains from prehistoric to historical times (ca. 11,000 BC to ca. AD 1850). Three lecture hours a week for one semester. Anthropology 324L (Topic: Plains Archaeology: Prehistory and History) and 326E may not both be counted. Prerequisite: Upper-division standing.

### ANT 326F. Great Discoveries in Archaeology.

Same as European Studies 346 (Topic 2: Great Discoveries in Archaeology). The stories, myths, and people behind some of the great archaeological discoveries. Three lecture hours a week for one semester. Only one of the following may be counted: Anthropology 324L (Topic: Great Discoveries in Archaeology), Anthropology 326F, European Studies 346 (Topic 2). Prerequisite: Upper-division standing.

### ANT 326L. Cultures in Contact.

History of the interactions of the indigenous peoples of the Americas with Africans, Asians, and Europeans over the past five hundred years. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

### ANT 327C. Topics in American Cultures.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

Topic 1: Race and Ethnicity in the United States.

### ANT 327D. Colonial Latin American Archaeology.

Same as Latin American Studies 324L (Topic 13). Focuses on the Spanish colonies in Latin America. Three lecture hours a week for one semester. Anthropology 327D and Latin American Studies 324L (Topic 13) may not both be counted.

### ANT 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Anthropology.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Anthropology. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### ANT 330C. Theories of Culture and Society.

Examination of the theoretical approaches that have established the intellectual foundations of contemporary sociocultural anthropology. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

### ANT 432L. Primate Anatomy.

Comparative and functional anatomy of primates, including humans; emphasis on adaptations and evolution of the various taxa. Three lecture hours and two laboratory hours a week for one semester. Prerequisite: Anthropology 301.

### ANT 336L. Native American Cultures North of Mexico.

Same as American Studies 321 (Topic 3: Native American Cultures North of Mexico). Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

### ANT 340C. Ethnographic Research Methods.

Introduction to methods used in conducting ethnographic research; emphasis on research design, analysis, writing, and ethical considerations. Three lecture hours a week for one semester. Prerequisite: Anthropology 302, 305, or 307.

### ANT 344K. Films: An Anthropological Perspective.

Films viewed and discussed. How is cultural meaning communicated? What systems of signification are involved? What are possibilities and limitations of ethnographic films? Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

### ANT 345C. Urban Cultures.

The culture of cities, including the distinctive forms of expressive culture, ethnic and racial conflict, and political or economic activity that cities generate. Three lecture hours a week or two lecture hours and one discussion hour a week for one semester. Prerequisite: Upper-division standing.

### ANT 346L. Primate Social Behavior.

Studies primate behavior and why primates do what they do, including basic theoretical principles and the models used to explain primate behavior. Three lecture hours a week for one semester. Prerequisite: Anthropology 301.

### ANT 346M. Comparative Primate Ecology.

The basics of how organisms interact with their environment, focusing on a wide range of primates from a comparative perspective. Discusses how various aspects of ecology are used to conserve primate populations. Three lecture hours a week for one semester. Prerequisite: Anthropology 301.

### ANT 347C. Methods in Primate Biology.

The study of primate behavior and the methods by which animal behavior is observed and documented. Students conduct a research project and write a report. One lecture hour and three laboratory hours a week for one semester. Prerequisite: Anthropology 346L, 346M, or Biology 359K with a grade of at least C.

### ANT 348. Human Origins and Evolution.

Detailed examination and analysis of morphological trends evident in the hominid fossil record. Two lecture hours and two laboratory hours a week for one semester. Prerequisite: Anthropology 301.

### ANT 348K. Current Topics in Biological Anthropology.

An in-depth study of current topics, controversies, and literature on the evolution, morphology, genetics, and behavioral ecology of primates, including humans. Three lecture hours a week for one semester; additional hours may be required for some topics. May be repeated for credit when the topics vary. Prerequisite: Anthropology 301.

**Topic 8: Evolutionary Anatomy of the Head and Neck.** The comparative and functional anatomy of the head and neck in primates and other mammals.

**Topic 10: Primate Conservation.** The theory and practices of conservation biology as applied to primates. Explores species and

community characteristics influencing extinction risk, current threats to primates, and potential conservation strategies.

Topic 11: Early Hominid Evolution. Examines the early stages of human evolution in Africa starting from the last common great ape ancestor through the origin of the genus Homo, looking at the behavioral and morphological adaptations that characterize the earliest stages of human evolution. Anthropology 348K (Topic: Early Hominid Evolution) and 348K (Topic 11) may not both be counted. Topic 12: Sex and Human Nature. Provides an introduction to the scientific study of sexual behavior, mate choice, and reproduction in humans from the perspective of evolutionary biology; examines a wide range of genetic, ecological, social, physiological, and behavioral aspects of human sexuality. Anthropology 348K (Topic: Sex and Human Nature) and 348K (Topic 12) may not both be counted. Topic 13: Adaptation and Human Behavior. Focuses on the analysis of human behavior and institutions from an evolutionary, adaptationist perspective. Examines subjects of central interest in the social sciences and traces the development of adaptationist approaches and evaluates their application to studying human behavior and social practices. Anthropology 348K (Topic: Adaptation and Human Behavior) and 348K (Topic 13) may not both be counted. Prerequisite: Upper-division standing.

#### ANT 349C. Human Variation.

The patterns of biological variation within and between human populations. Examines physical, genetic, and behavioral traits, and considers both the microevolutionary and cultural processes that influence those traits. Three lecture hours a week for one semester. Anthropology 348K (Topic: Human Variation) and 349C may not both be counted. Prerequisite: Anthropology 301.

#### ANT 349D. Anthropological Genetics.

Basic principles of molecular genetics and population genetics as they relate to the study of humans and other primates. Three lecture hours a week for one semester. Anthropology 348K (Topic: Anthropological Genetics) and 349D may not both be counted. Prerequisite: Anthropology 301.

#### ANT 350C. Primate Sensory Ecology.

An integrated perspective on the comparative anatomy, physiology, and ecological significance of sensory adaptations in primates. Three lecture hours a week for one semester. Prerequisite: Anthropology 301.

#### ANT 351E. Primate Evolution.

Examination of the fossil record for nonhuman primate evolution, including basic concepts of the anatomy, ecology, and systematics of living primates. Three lecture hours a week for one semester. Prerequisite: Anthropology 301.

#### ANT 453. Archaeological Analysis.

Derivation of chronology and cultural information from archaeological data; the role of archaeology in modern life. Four lecture hours a week for one semester. Prerequisite: Anthropology 304.

#### ANT 353E. Archaeological Laboratory Analysis.

The analysis of artifacts, features, architecture, and other remains recovered in the field. Four and one-half laboratory hours a week for one semester. Anthropology 324L (Topic: Archaeological Laboratory Analysis) and 353E may not both be counted. Prerequisite: Anthropology 662.

#### ANT 358Q. Supervised Research.

Individual instruction. Prerequisite: Upper-division standing.

#### ANT 360K. The Civilization of the Maya.

Same as Latin American Studies 324L (Topic 10: The Civilization of the Maya). Maya prehistory and history: the archaeological record, codices and inscriptions, and Spanish conquest writings. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### ANT 662. Field Archaeology.

Two hundred and forty hours of fieldwork. May be repeated for credit, but may be taken only once on the letter-grade basis. May be repeated for credit.

#### ANT 362K. Archaeology of Texas and Vicinity.

Cultural history of Texas and neighboring areas, from early prehistoric times to Anglo-American settlements. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### ANT 462M. Archaeological Techniques.

Problems in planning, organizing, and carrying out archaeological surveys and excavations. Four lecture hours a week for one semester. Prerequisite: Anthropology 453.

#### ANT 366. Anatomy and Biology of the Human Skeleton.

Comprehensive study of the human skeleton, with special attention to methods of identification. One lecture hour and four laboratory hours a week for one semester. Prerequisite: Upper-division standing and Anthropology 301.

#### ANT 376P, 676P. Research Internship.

Restricted to anthropology majors. Supervised fieldwork in a business or community setting related to the student's career and research interests. Students conduct research and apply anthropological skills to real-world problems. Approximately 150 or 300 hours of fieldwork. May be repeated for credit, but no more than six semester hours may be counted toward the major requirement. Prerequisite: Upper-division standing and consent of instructor.

#### ANT 379. Problems in Anthropology.

Supervised individual research on selected problems in anthropology. Three lecture hours a week for one semester. May be repeated for credit. Prerequisite: Six semester hours of upper-division coursework in anthropology and consent of instructor.

#### ANT 679H. Honors Tutorial Course.

For honors candidates in anthropology. Individual reading of selected works for one semester, followed in the second semester by the writing of an honors thesis. Conference course for two semesters. Prerequisite: For 679HA, admission to the Anthropology Honors Program; for 679HB, Anthropology 679HA.

## Science, Technology, and Society: STS

#### **Lower-Division Courses**

## STS 101. Key Ideas and Issues in Science, Technology, and Society.

Designed to introduce students to the main areas of interest in science, technology, and society. Lectures, readings, and discussions include speakers from various academic disciplines. One lecture hour a week for one semester. Offered on the pass/fail basis only.

#### STS 311. Topics in Science, Technology, and Society.

Some topics may include an academic service-learning component. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

## STS 318. How We Shape Discoveries and How They Shape Us.

Technical, historical, and cultural approaches to the multiple dimensions and complexities of scientific and technological innovation, and how they shape and are shaped by society. Cases for discussion are drawn from energy discoveries, nanoscience, biomedicine, and materials science advances. Three lecture hours a week for one semester.

#### STS 319. Information Technology and Social Life.

The impact of technologies on social life, and the necessity for applying skills developed in the liberal arts to managing new ways of life mediated through technologies, including work and home environments. Includes an academic service-learning component. Three lecture hours a week for one semester.

## **Upper-Division Courses**

#### STS 321. Introduction to Science, Technology, and Society.

Introduction to the history of communication technology, including how past innovations shaped societies and how current changes are transforming human cultures, universities, and the liberal arts. Three lecture hours a week for one semester. Prerequisite: Completion of at least thirty semester hours of coursework.

#### STS 331. Topics in Science, Technology, and Society.

Some topics may include an academic service-learning component. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

#### STS 332. The Nanotechnology and Science Revolution.

The societal impacts of nanotechnology and how this emerging technology might transform the future of technologies, manufacturing, and innovation. Three lecture hours a week for one semester. Science, Technology, and Society 331 (Topic: Impacts of Science: Nanotechnology, Technology, and Life) and 332 may not both be counted.

## STS 360. Senior Seminar in Science, Technology, and Society.

Senior capstone seminar. Allows the student to integrate the knowledge he or she has gained in the major field of study with that provided by the concentration in science, technology, and society. Three lecture hours a week for one semester. Prerequisite: Completion of at least ninety semester hours of coursework, including Science, Technology, and Society 321.

## STS 367. Conference Course in Science, Technology, and Society.

Supervised work on specific projects in science, technology, and society. Three conference hours a week for one semester. May be repeated for credit. Prerequisite: Completion of at least thirty-six semester hours of coursework and approval of written application by the supervising instructor.

#### STS 370. Research Internship.

Supervised fieldwork in a business or community setting related to the student's career and research interests. Approximately six to ten hours of work a week for one semester, to be arranged with faculty member and internship sponsor. May be repeated for credit, but no more than six semester hours of Science, Technology, and Society 370 may be counted toward the concentration requirement. Prerequisite: Science, Technology, and Society 321, upper-division standing, and consent of instructor.

## **Department of Asian Studies**

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

## **Asian Studies: ANS**

### **Lower-Division Courses**

#### ANS 301M. Introductory Topics in Asian Studies.

Discussion of various problems involving language, history, and culture in Asia. Three lecture hours a week for one semester; additional hours may be required for some topics. May be repeated for credit when the topics vary.

**Topic 3: History of East Asia to 1800.** Same as History 305K. A survey of the traditional history and culture of China, Japan, Korea, and Vietnam.

**Topic 4: History of East Asia since 1800.** Same as History 305L. A survey of the modern history of China, Japan, Korea, and Vietnam. **Topic 6: Asia's Futures.** Same as Government 314 (Topic 5: Asia's Futures). Current issues, visible trends, and projections for Asia's future.

**Topic 11: Introduction to Buddhism.** Same as Religious Studies 312C. A structural and historical overview of Buddhism through the examination of various schools, doctrines, biographical narratives, and contemporary ethical issues. Only one of the following may be counted: Asian Studies 301M (Topic 11), Religious Studies 312 (Topic: Introduction to Buddhism), 312C.

Topic 13: Forbidden Romance in Modern Chinese Literature. Same as Comparative Literature 305 (Topic 1). Introduction to modern Chinese literature from the late Qing Dynasty (latter half of the nineteenth century) to the present. Only one of the following may be counted: Asian Studies 301M (Topic: Forbidden Romance in Modern Chinese Literature), 301M (Topic 13), Comparative Literature 305 (Topic: Forbidden Romance in Modern Chinese Literature), 305 (Topic 1). Topic 14: East Asian Martial Arts Films. Explores the concept of "East Asian" from the cinematic perspective, focusing on the martial arts film genre. Additional hours required for film screenings. Asian Studies 301M (Topic: Everybody is Kung Fu Fighting) and 301M (Topic 14) may not both be counted.

**Topic 15: Introduction to Islam.** Same as History 306N (Topic 7), Islamic Studies 310, and Religious Studies 319. The beliefs, theology, history, and main social and legal institutions of Islam, including the concept of God and society, the role of women, and Islamic government and movements. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Asian Studies 301M (Topic 15), History 306N (Topic 7), Islamic Studies 310, Religious Studies 319. **Topic 16: Introduction to Japanese Film.** Broad survey of Japanese cinema, including silent films, feature films, documentaries, and anime, that covers the basic history of Japanese cinema. Background in Japanese not required, all films are subtitled in English. Additional hours may be required for film/media screenings. Asian Studies 301M (Topic: Introduction to Japanese Film) and 301M (Topic 16) may not both be counted.

**Topic 17: Introduction to Politics in East Asia.** Same as Government 314 (Topic 11). Introduction to politics and political systems of Japan, China, Taiwan, North Korea, and South Korea. Only one of the following may be counted: Asian Studies 301M (Topic: Introduction to Politics in East Asia), 301M (Topic 17), Government 314 (Topic: Introduction to Politics in East Asia), 314 (Topic 11).

#### ANS 301R. History of the Religions of Asia.

Same as Religious Studies 302. Eastern religions: an introduction to the basic forms and the historical development of the religious traditions of India, China, and Japan. Three lecture hours a week for one semester.

#### ANS 302C. Introduction to China.

Same as History 302C. Introduction to Chinese civilization, past and present, including religion, literature, arts, philosophy, and history. Three lecture hours a week for one semester. Only one of the following may be counted: Asian Studies 302C, History 302C, 306N (Topic: Introduction to China).

#### ANS 302D. Introduction to Korean Culture and History.

Introduction to Korea's history, culture, and civilization from antiquity to the present. Three lecture hours a week for one semester. Asian Studies 301M (Topic 10) and 302D may not both be counted.

#### ANS 302J. Introduction to Japan.

Introduction to Japanese civilization, past and present, including religion, literature, arts, philosophy, and history. Three lecture hours a week for one semester.

#### ANS 302K. Introduction to South Asia.

Same as Anthropology 310L (Topic 5: Introduction to India). Introduction to Indian and south Asian civilization, past and present, including religion, literature, arts, philosophy, and history. Only one of the following may be counted: Anthropology 310L (Topic 5), Asian Studies 302K, History 306N (Topic: Introduction to India).

#### ANS 307C. Introduction to the History of India.

Same as History 307C. Survey of the history of the Indian subcontinent from prehistoric times to the present. Three lecture hours a week for one semester.

#### ANS 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Asian Studies.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Asian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### ANS 320. Topics in Great Literatures of Asia.

Conducted in English. Introduction to various Asian literatures, emphasizing philosophical, religious, and social concepts. Three lecture hours a week for one semester; additional hours may be required for some topics. Asian Studies 320 and 361 may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 2: Genji to Godzilla: Adaptations of the Japanese Classics. Examines how premodern, modern, and contemporary classics of Japanese literature, film, and theater get adapted over the centuries, and how culture, politics, gender, genre, and medium influence the adaptation process. Additional hours may be required for film/media screenings. Asian Studies 320 (Topic: Genji to Godzilla) and 320 (Topic 2) may not both be counted. Additional prerequisite: Upperdivision standing.

#### ANS 321M. Politics in Japan.

Same as Government 321M. Survey of postwar Japanese politics; the occupation, governmental institutions, interest groups, protest

movements, industrial policy, the government-business relationship, and political and economic reform. Three lecture hours a week for one semester. Asian Studies 321M and Government 321M may not both be counted. Prerequisite: Six semester hours of lower-division coursework in government.

#### ANS 322M. Politics in China.

Same as Government 322M. Survey of twentieth-century China: historical trends; 1911 revolution; Warlord-Nationalist period; Communist revolution; post-1949 issues; new social and political institutions. Three lecture hours a week for one semester. Only one of the following may be counted: Asian Studies 322M, 361 (Topic: Politics in China), Government 322M. Prerequisite: Six semester hours of lower-division coursework in government.

#### ANS 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Asian Studies.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Asian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### ANS 338L. East Asian International Relations.

Same as Government 338L. Survey of Russian/Soviet, Japanese, Chinese, and American foreign policies of the twentieth century, emphasizing Pacific-region interests; historical policies; intermittent conflicts, such as China versus Japan, Korean War, Indochina Wars; China's emergence as a nuclear power. Three lecture hours a week for one semester. Only one of the following may be counted: Asian Studies 338L, 361 (Topic: East Asian International Relations), Government 338L. Prerequisite: Upper-division standing and six semester hours of lowerdivision coursework in government.

#### ANS 340. Topics in Asian Religions.

Topics in the religions and mythologies of the peoples of Asia. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 4: History of Hindu Religious Traditions.** Same as Anthropology 324L (Topic 23: History of Hindu Religious Traditions), History 364G (Topic 1: History of Hindu Religious Traditions), and Religious Studies 321. History of major doctrines, practices, and institutions that shaped the development of Hinduism; how religions adapt to social and cultural change and often provide the catalyst for change. Prerequisite: Upper-division standing.

**Topic 5: History of Indian Buddhism.** Same as Religious Studies 322. The institutional, social, economic, and doctrinal history of Buddhism in India. Prerequisite: Upper-division standing or consent of instructor. **Topic 6: Religion and Rebellion in Modern East Asia.** Same as Religious Studies 352 (Topic 3). Examines how nineteenth- and twentieth-century new religious movements in Japan, China, Korea, and Tibet have expressed dissatisfaction with society and/or the state through rebellious and sometimes violent activity. Only one of the following may be counted: Asian Studies 340 (Topic 6), History 364G (Topic: Religion/Rebellion in Modern East Asia), Religious Studies 352 (Topic 3).

**Topic 7: Goddesses in World Religions and Cultures.** Same as Religious Studies 373 (Topic 3) and Women's and Gender Studies 340 (Topic 30). Historical and cross-cultural overview of the relationship between feminine and religious cultural expressions through comparative examinations and analyses of various goddess figures in world religions. Only one of the following may be counted: Anthropology 324L (Topic: Goddesses in World Religions and Cultures), Asian Studies 340 (Topic 7), Religious Studies 373 (Topic: Goddesses in World Religions and Cultures), 373 (Topic 3), Women's and Gender Studies 340 (Topic: Goddesses in World Religions and Cultures), 340 (Topic 30). Additional prerequisite: Upper-division standing.

**Topic 8: Sufism and Islamic Mysticism.** Same as Islamic Studies 340 (Topic 4), Middle Eastern Studies 342 (Topic 24), and Religious Studies 358 (Topic 4). Muslim debates of Sufism; the historical development of Sufi beliefs regarding theology, religious laws, expression, and popular social practices. Only one of the following may be counted: Asian Studies 340 (Topic: Sufism and Islamic Mysticism), Asian Studies 340 (Topic 8), History 364G (Topic: Sufism and Islamic Mysticism), Islamic Studies 340 (Topic 4), Middle Eastern Studies 320 (Topic 16: Sufism: Islamic Mysticism and Spirituality), 342 (Topic 24), Religious Studies 341 (Topic: Sufism and Islamic Mysticism), 358 (Topic 4). Additional prerequisite: Upper-division standing.

**Topic 9: Religion in Japanese History.** Same as Religious Studies 352 (Topic 7: Religion in Japanese History). Examines religious concepts and practices in wider contexts of modern Japanese culture and society. Focuses on the critical understanding of the individual and collective aspects of Japanese spiritual life.

**Topic 10: Ritual and Religion in Korea.** Same as Religious Studies 352 (Topic 4: Ritual and Religion in Korea). Examination of major religious traditions of Korea; focus on the recent history and contemporary practice, and the relation between religion and politics during Korea's colonial (1910-1945) and postcolonial eras. Three lecture hours a week for one semester. Only one of the following may be counted: Anthropology 324L (Topic: Ritual and Religion in Korea), Asian Studies 340 (Topic 10), Religious Studies 352 (Topic 4). Additional prerequisite: Upper-division standing.

**Topic 23: Saints and Shrines in Islam.** Same as Religious Studies 358 (Topic 23). A survey of the history of sainthood (walayat) in Islam and the religious customs surrounding saint shrines in Muslim societies across the Middle East, Central Asia, and South Asia. Only one of the following may be counted: Asian Studies 340 (Topic: Saints & Shrines In Islam), 340 (Topic 23), Religious Studies 358 (Topic 23). Additional prerequisite: Upper-division standing.

#### ANS 340L. Post-Mao China: Change and Transformation.

Same as History 340L. Examines in a historical context the Chinese economy, society, politics, and culture during the reform era that began in the late 1970s. Explores the transformation of rural and urban economies and related social consequences; government systems, political ideologies, and popular values; and China's integration into the global system and its impact on China's role in world politics. Three lecture hours a week for one semester. Only one of the following may be counted: Asian Studies 340L, 361 (Topic: Post-Mao China: Change and Transformation), History 340L, 364G (Topic: Post-Mao China: Change and Transformation). Prerequisite: Upper-division standing.

#### ANS 340M. Modern China.

Same as History 340M. History of China from the intrusion of the West circa 1500 to the Communist revolution. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### ANS 340P. European Expansion in Asia.

Same as History 340P. European exploration, the commerce of the East India Companies, and the beginnings of empire in South and Southeast Asia from the fifteenth to the early nineteenth century. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### ANS 340R. European Empires in Asia.

Same as History 340R. The British in India and Malaya, the Dutch in Indonesia, and the French in Indochina since 1800. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### ANS 340S. The Chinese in the United States.

Same as Asian American Studies 325 (Topic 3) and History 340S. History of the Chinese in the United States from their first arrival in significant numbers during the California Gold Rush of the mid-nineteenth century to the present. Three lecture hours a week for one semester. Only one of the following may be counted: Asian American Studies 325 (Topic: Chinese in the United States), 325 (Topic 3), Asian Studies 340S, History 340S. Prerequisite: Upper-division standing.

#### ANS 340T. Taiwan: Colonization, Migration, and Identity.

Same as Asian American Studies 325 (Topic 4: Taiwan: Colonization, Migration, Identity) and History 340T. Explores issues of ethnicity, empire, and modernization in East Asia from the sixteenth century to the present, as seen through encounters between Taiwan and aborigines, Han Chinese, Dutch, Portuguese, the imperial Qing, Japanese, mainland Chinese Nationalist Party (KMT), and the United States. Three lecture hours a week for one semester. Only one of the following may be counted: Asian American Studies 325 (Topic 4), Asian Studies 340T, 361 (Topic: Taiwan: Colonization, Migration, and Identity), History 340T, 364G (Topic: Taiwan: Colonization, Migration, and Identity). Prerequisite: Upper-division standing.

#### ANS 341K. Origins of Modern Japan.

Same as History 341K. Japan to the beginnings of the Industrial Revolution, with a focus on the culminating age of samurai rule, the Tokugawa period (1600-1867). Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### ANS 341M. Imperial Japan.

Same as History 341M. Japan from the Meiji transformation through war, defeat, and occupation. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### ANS 341N. Postwar Japan.

Same as History 342C. Japan since the war and occupation. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### ANS 342D. Political Economy of Japan.

Same as History 342D. Historical development of the Japanese economy since early modern times. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### ANS 346C. Ancient India.

Same as History 346C. History and culture of South Asia from its protohistoric beginnings in the Indus Valley through the period of the early empires of the Mauryas and Guptas. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### ANS 346D. Medieval India.

Same as History 346D. History and culture of South Asia from approximately 500 to 1500, with emphasis on religious and political institutions and the emergence of regional cultures. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### ANS 346M. Early Modern India.

Same as History 346M. The history and culture of South Asia from approximately 1500 to 1750. Three lecture hours a week for one semester. Only one of the following may be counted: Asian Studies

346M, History 346M, Religious Studies 341 (Topic 6). Prerequisite: Upperdivision standing.

#### ANS 346N. The Indian Subcontinent, 1750-1950.

Same as History 346N. Examines the cultural and political movements and events that led to formation of the two nation-states India and Pakistan. Three lecture hours a week for one semester. Asian Studies 346N and History 346N may not both be counted. Prerequisite: Upperdivision standing.

#### ANS 347K. Governments and Politics of South Asia.

Same as Government 347K. A survey of political developments, governmental organization, and economic and social problems in South Asia. Three lecture hours a week for one semester. Prerequisite: Six semester hours of lower-division coursework in government.

#### ANS 361. Topics in Asian Studies.

Selected topics in south and east Asian anthropology, economics, history, geography, government, and sociology. Three lecture hours a week for one semester; additional hours may be required for some topics. Asian Studies 320 and 361 may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites vary with the topic.

**Topic 5: Cultures of Southeast Asia**. Asian Studies 361 (Topic 5) is same as Anthropology 324L (Topic 8: Cultures of Southeast Asia). Comparative study of the peoples of Indonesia, Burma, Thailand, Malaysia, and other countries. Additional prerequisite: Upper-division standing.

**Topic 6: Gandhi and Gandhism.** Asian Studies 361 (Topic 6) is same as History 350L (Topic 5: Gandhi and Gandhism) and Religious Studies 341 (Topic 5: Gandhi and Gandhism).

**Topic 11: Musics of India.** Asian Studies 361 (Topic 11) is same as Anthropology 324L (Topic 13: Musics of India) and Music 342 (Topic 3: Musics of India). Prerequisite: Upper-division standing.

Topic 13: China and the New Asian Region. Same as Government 365L (Topic 6). Foreign policy issues in China, Asia, and Eastern Russia. Only one of the following may be counted: Asian Studies 361 (Topic: China and the New Asian Region), 361 (Topic 13), Government 365L (Topic: China and the New Asian Region), 365L (Topic 6). Topic 22: Japanese Foreign Policy. Asian Studies 361 (Topic 22) is same as Government 365L (Topic 2: Japanese Foreign Policy). An

introduction to the foreign and domestic determinants of Japanese foreign policy. **Topic 23: International Relations of East and Southeast Asia.** Asian

Studies 361 (Topic 23) is same as Government 365L (Topic 3: International Relations of East and Southeast Asia). An introduction to the international relations of East and Southeast Asia). An introduction to the international relations of East and Southeast Asia, with particular attention to postwar economic and security issues, the changing political landscape of the post-Cold War period, and the development and functions of regional institutions.

**Topic 24: The Two Koreas and the United States.** Same as Asian American Studies 325 (Topic 7). The political, social, and cultural relationship between North and South Korea, and between the Koreas and the United States, since 1945. Only one of the following may be counted: Anthropology 324L (Topic: The Two Koreas and the US), Asian American Studies 325 (Topic: The Two Koreas and the US), 325 (Topic 7), Asian Studies 361 (Topic 24), Government 360N (Topic: The Two Koreas and the US), History 364G (Topic: The Two Koreas and the US).

**Topic 25: Capitalism, Consumption, and Civil Society in Korea.** Contemporary social and political life in urban South Korea, including such topics as corporations, factory work, consumption, activism, popular culture, and changing gender systems and roles. Anthropology 324L (Topic: Capitalism, Consumption, and Civil Society in Korea) and Asian Studies 361 (Topic 25) may not both be counted. **Topic 27: Anthropology of the Himalayas**. Anthropology 324L (Topic: Anthropology of the Himalayas) and Asian Studies 361 (Topic 27) may not both be counted.

Topic 28: The Chinese in Diaspora. Same as Asian American Studies 325 (Topic 2) and History 350L (Topic 65). Explores narratives of migration, race, ethnicity, and a wide range of experiences of acculturation and assimilation from the perspective of a sending society--China--which has one of the longest and most diverse histories of sending people overseas. Over the last millennia, Chinese have migrated around the world and made homes under a great range of adversity and opportunity, producing many stories of human differences and commonalities. For 361, three lecture hours a week for one semester; for 461, four lecture hours a week for one semester. Only one of the following may be counted: Asian American Studies 325 (Topic: Chinese in Diaspora), 325 (Topic 2: The Chinese in Diaspora), Asian Studies 361 (Topic: Chinese in Diaspora), 361, 461 (Topic 28), History 350L (Topic: The Chinese in Diaspora), 350L (Topic 65: The Chinese Diaspora). Additional prerequisite: Upper-division standing.

**Topic 29: Biomedicine, Ethics, and Culture**. Same as Religious Studies 373M. Examines ethical questions such as the allocation of medical resources, stem cell research and cloning, organ transplantation, abortion, human experimentation, prolonging life and the right to die, suicide, euthanasia, and diagnosis and treatment of illnesses, explored from a global perspective. Three lecture hours a week for one semester. Only one of the following may be counted: Anthropology 324L (Topic: Biomedicine, Ethics, and Culture), Asian Studies 361 (Topic: Biomedicine, Ethics, and Culture), 361 (Topic 29), Religious Studies 373 (Topic: Biomedicine, Ethics, and Culture), 373M. Additional prerequisite: Upper-division standing.

**Topic 30: Why Chinese Has No Alphabet.** Introduction to the history and evolution of the Chinese writing system and language. No background in Chinese language, culture, or linguistics is required. Three lecture hours a week for one semester. Only one of the following may be counted: Asian Studies 361 (Topic: Why Chinese Has No Alphabet), 361 (Topic 30), Linguistics 350 (Topic: Why Chinese Has No Alphabet).

**Topic 31: Global Markets and Local Cultures.** Same as Anthropology 324L (Topic 49). Examines contemporary theories of globalization, including materials exploring global governance, international monetary policy, migration regulation, offshoring, and cultural hybridity. Focuses on case studies in Asia and elsewhere that reveal how these practices impact particular communities. Only one of the following may be counted: Anthropology 324L (Topic: Global Markets and Local Cultures), 324L (Topic 49), Asian Studies 361 (Topic 31), 372 (Topic: Global Markets and Local Cultures), 372 (Topic 26). Additional prerequisite: Upper-division standing.

**Topic 32: The History of Chinese Language and Translation.** In-depth study of the Chinese language and culture focusing on the cultural, social, historical, and political background against which the Chinese language has evolved and continues to evolve. Asian Studies 361 (Topic: Lost in Translation: Chinese Language and Literature) and 361 (Topic 32) may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 33: Mughal India in History and Memory.** Same as History 350L (Topic 67) and Islamic Studies 372 (Topic 20). Focuses on South Asia during the era of the Mughal empire (1550-1750), continuing through the symbolic relevance of the Mughal dynasty in British India and in India today. Only one of the following may be counted: Asian Studies 361 (Topic: Mughal India in History and Memory), 361 (Topic 33), History 350L (Topic: Mughal India in History and Memory), 350L (Topic 67), Islamic Studies 372 (Topic: Mughal India in History and Memory), 372 (Topic 20).

**Topic 34: Modernization in East Asia.** Same as History 364G (Topic 8). Examines the different historical experiences of mainland China and Taiwan in the context of the East Asian model of development. Only one of the following may be counted: Asian Studies 361, 461 (Topic: Modernization in East Asia), 361 (Topic 34), History 364G (Topic: Modernization in East Asia), 364G (Topic 8).

**Topic 36: Political Economy of Asia.** Same as Government 365L (Topic 4). Explores the political economies of East Asia with an emphasis on Japan, China, South Korea, and Taiwan. Only one of the following may be counted: Asian Studies 361 (Topic: Political Economy of Asia), 361 (Topic 36), Government 365L (Topic: Political Economy of Asia), 365L (Topic 4).

**Topic 37: Rights and the State in South Asia.** Same as Government 365L (Topic 7). A study of states and societies in South Asia and the challenge of creating rights and respecting political orders. Only one of the following may be counted: Asian Studies 361 (Topic: Rights and the State in South Asia), 361 (Topic 37), Government 365L (Topic: Rights and the State in South Asia), 365L (Topic 7).

**Topic 38: Religion and Family in Japanese Society.** Same as Religious Studies 352 (Topic 9). Explores the structures of family, kinship, and religion in Japan since 1868 and their roles in the creation and expression of national and individual identities. Only one of the following may be counted: Anthropology 324L (Topic: Religion and Family in Japanese Society), Asian Studies 361 (Topic 38), 372 (Topic: Religion and Family in Japanese Society), Religious Studies 352 (Topic: Religion and Family in Japanese Society), 352 (Topic 9).

**Topic 39: Anthropology of Globalization**. Only one of the following may be counted: Anthropology 324L (Topic: Anthropology of Globalization), Asian Studies 361 (Topic: Anthropology of Globalization), 361 (Topic 39).

**Topic 40: Asian Regionalism and Multilateral Cooperation.** Same as Government 365L (Topic 5). Addresses the nature, functional principles, leadership, and policy-making process of contemporary Asian regionalism in comparison to the experiences of European integration. Only one of the following may be counted: Asian Studies 361 (Topic: Asian Regionalism and Multilateral Cooperation), 361 (Topic 40), Government 365L (Topic: Asian Regionalism and Multilateral Cooperation), 365L (Topic 5). Additional prerequisite: Upper-division standing and six semester hours of lower-division coursework in government.

**Topic 41: Uprising in India-1857.** Same as History 350L (Topic 92). Introduces the problems faced with the uprising of 1857 in India, the most violent and widespread attempt ever made to destroy the British empire in South Asia. Only one of the following may be counted: Asian Studies 361 (Topic: Uprising in India-1857), 361 (Topic 41), History 350L (Topic: Uprising in India-1857), 350L (Topic 92).

**Topic 43: Slavery and South Asian History.** Same as History 364G (Topic 16). Discuss the presence of slavery in the subcontinent in the third century BCE to the twentieth century. Three lecture hours a week for one semester. Only one of the following may be counted: Asian Studies 361 (Topic: Slavery and South Asian History), 361 (Topic 43), History 364G (Topic: Slavery and South Asian History), 364G (Topic 16).

**Topic 44: Gender and Modern India.** Same as History 364G (Topic 13). Examines gender and the shifting nature of modernity between precolonial and colonial periods in the Indian subcontinent. Three lecture hours a week for one semester. Only one of the following may be counted: Asian Studies 361 (Topic: Gender and Modern India), 361 (Topic 44), History 364G (Topic: Gender and Modern India), 364G (Topic 13).

**Topic 46: Business and Society in South Asia.** Same as History 364G (Topic 12). Introduction to the long history of commerce and enterprise in the Indian sub-continent up to the present. Three lecture hours a week for one semester. Only one of the following may be counted: Asian Studies 361 (Topic: Business and Society in South

Asia), 361 (Topic 46), History 364G (Topic: Business and Society in South Asia), 364G (Topic 12).

**Topic 47: Global Indian Literature.** Same as Asian American Studies 320 (Topic 5) and English 360L (Topic 3). Only one of the following may be counted: Asian American Studies 320 (Topic: Global Indian Literature), 320 (Topic 5), Asian Studies 361 (Topic: Global Indian Literature), 361 (Topic 47), English 360L (Topic: Global Indian Literature), 360L (Topic 3). Additional prerequisite: Nine semester hours of coursework in English or Rhetoric and Writing.

**Topic 48: Global Economies: Asia and the United States.** Same as Asian American Studies 325 (Topic 11). Examines key trends in the economies of the United States and Asia, with emphasis on the links between these two major trading blocs. Only one of the following may be counted: Asian American Studies 325 (Topic: Global Economies: Asia & US), 325 (Topic 11), Asian Studies 361 (Topic: Global Economies: Asia & US), 361 (Topic 48). Additional prerequisite: Upper-division standing.

**Topic 49: Development And Its Critics.** Same as Anthropology 324L (Topic 4). Only one of the following may be counted: Anthropology 324L (Topic: Development And Its Critics), 324L (Topic 4), Asian Studies 361 (Topic: Development And Its Critics), 361 (Topic 49). Additional prerequisite: Upper-division standing.

**Topic 50: Asian Mobilities.** Same as Asian American Studies 330 (Topic 7). Three lecture hours a week for one semester. Only one of the following may be counted: Asian American Studies 330 (Topic: Asian Mobilities), 330 (Topic 7), Asian Studies 361 (Topic: Asian Mobilities), 361 (Topic 50). Additional prerequisite: Upper-division standing.

#### ANS 362. Research in Asian Studies.

Individual instruction for Asian studies majors and nonmajors. Discussion, research, and the writing of papers about various general and specialized Asian subjects. Conference course. May be repeated for credit. Prerequisite: Six semester hours of coursework in Asian studies and written consent of instructor on form obtained from the undergraduate adviser.

#### ANS 372. Topics in Asian Cultures.

Selected topics in south and east Asian art, literature, music, and philosophy. Three lecture hours or two lecture hours and one discussion hour a week for one semester; additional hours may be required for some topics. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites vary with the topic.

**Topic 2: Indian Philosophies.** Same as Philosophy 348 (Topic 2: Indian Philosophies) and Religious Studies 341 (Topic 1: Indian Philosophies). Three lecture hours or two lecture hours and one laboratory/discussion hour a week for one semester.

**Topic 6: Chinese Film and Literature.** Only one of the following may be counted: Asian Studies 372 (Topic: Chinese Film and Literature), 372 (Topic 6), Comparative Literature 323 (Topic: Chinese Film and Literature). Additional prerequisite: Upper-division standing.

**Topic 7: Chinese Thought and Culture.** Three lecture hours a week for one semester. Prerequisite: Upper-division standing or consent of instructor.

**Topic 10: Decoding Classical Chinese Poetry.** Same as Comparative Literature 323 (Topic 41). Introduction to the classical Chinese poetic tradition from the seventh century B.C.E. through the ninth century C.E., focusing on the literary, cultural, historical, social, political, philosophical, and religious background against which representative works arose. Conducted in English and all readings will be in English translation. Knowledge of the Chinese language is not required. Only one of the following may be counted: Asian Studies 372 (Topic: Decoding Classical Chinese Poetry), 372 (Topic 10), Comparative Literature 323 (Topic: Decoding Classical Chinese Poetry), 323 (Topic 41). Additional prerequisite: Upper-division standing. **Topic 11: A Tale of Five Chinese Cities.** Literary and cinematic texts about Beijing, Hong Kong, Nanjing, Shanghai, and Taipei exploring themes of modernization, migration, international relations, gender, and labor with an aim toward radically rethinking certain historical moments and the notion of Chineseness in an increasingly and culturally deterritorialized world. Asian Studies 372 (Topic: A Tale of Five Chinese Cities) and 372 (Topic 11) may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 14: Veiling in the Muslim World.** Same as Islamic Studies 372 (Topic 2), Middle Eastern Languages and Cultures 321 (Topic 22), Religious Studies 358 (Topic 5), and Women's and Gender Studies 340 (Topic 11). Only one of the following may be counted: Asian Studies 372 (Topic 14), Islamic Studies 372 (Topic 2), Middle Eastern Languages and Cultures 321 (Topic 22), Religious Studies 358 (Topic 5), Women's and Gender Studies 340 (Topic 11).

**Topic 17: Women in Modern Japanese Fiction**. Same as Women's and Gender Studies 340 (Topic 12: Women in Modern Japanese Fiction). Additional prerequisite: Upper-division standing or consent of instructor.

**Topic 19: Diversity of Indian Traditions.** Same as Religious Studies 341 (Topic 2: Diversity of Indian Traditions). Art and architecture of South Asia from 1200 to 1900 CE, within the context of Indian culture. Three lecture hours a week for one semester. Prerequisite: For art history and visual art studies majors, Art History 302 and 303; for others, at least one of the following is advisable but not required: Art History 301, 302, 303.

**Topic 21: Women and Gender in China.** Same as History 350L (Topic 46: Women and Gender in China) and Women's and Gender Studies 340 (Topic 18: Women and Gender in China).

**Topic 24: Buddhist Art.** Same as Art History 348N and Religious Studies 341 (Topic 8). Explores the development of Buddhist art in South Asia, the land of its origin as well as its spread elsewhere. Focus on the question of "what is" Buddhist art. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 348N, 372 (Topic: Buddhist Art), Asian Studies 372 (Topic 24), Religious Studies 341 (Topic 8).

**Topic 25: Gender, Sexuality, and the Family in Indian Religions and Cultures.** Same as Anthropology 324L (Topic 40: Gender, Sexuality, and the Family in Indian Religions and Cultures), Religious Studies 341 (Topic 3: Gender, Sexuality, and the Family in Indian Religions and Cultures), and Women's and Gender Studies 340 (Topic 25: Gender, Sexuality, and the Family in Indian Religions and Cultures). A comprehensive historical overview of gender issues as they are represented in the textual traditions of South Asia.

**Topic 27: History and Archaeology of Early China.** Examination of the ancient roots of Chinese civilization from the Neolithic period (beginning 8000 BCE) through the establishment of the Han Dynasty (206 BCE to 220 CE). Three lecture hours a week for one semester. Only one of the following may be counted: Asian Studies 372 (Topic: Early China: History and Archaeology), 372 (Topic 27), History 364G (Topic: Early China: History and Archaeology).

**Topic 28: Popular Literature and Culture in Modern China.** An examination of modern Chinese literature and culture in the People's Republic of China, Taiwan, and Hong Kong from the popular culture perspective. Additional hours may be required for film screenings. Asian Studies 372 (Topic: Popular Literature and Culture in Modern China) and 372 (Topic 28) may not both be counted.

**Topic 29: South Indian Cultural History.** Introductory course examining the major components of Indian culture with an emphasis on South India. Three lecture hours a week for one semester. Asian Studies 372 (Topic: South Indian Cultural History) and 372 (Topic 29) may not both be counted.

**Topic 30: Gender and Sexuality in Japan.** Same as History 364G (Topic 10) and Women's and Gender Studies 340 (Topic 28). Examines gender and sexuality in Japan during the classical (Heian), early

modern (Tokugawa or Edo), and modern periods. Considers the construction and representation of feminine and masculine gender and sexuality, both normative and otherwise. Only one of the following may be counted: Asian Studies 372 (Topic: Gender and Sexuality in Japan), 372 (Topic 30), History 364G (Topic: Gender and Sexuality in Japan), 364G (Topic 10), Women's and Gender Studies 340 (Topic: Gender and Sexuality in Japan), 340 (Topic 28).

Topic 31: Devotion in South India. Same as Religious Studies 341 (Topic 13). Examines aspects of devotion in everyday life and how religions, such as Islam, Buddhism, and Christianity, are translated into a predominantly Hindu South India. Only one of the following may be counted: Asian Studies 372 (Topic: Devotion in South India), 372 (Topic 31), Comparative Literature 323 (Topic: Devotion in South India), Religious Studies 341 (Topic: Devotion in South India), 341 (Topic 13). Additional prerequisite: Upper-division standing. **Topic 32: Confucianism.** Same as Religious Studies 352 (Topic 10). Philosophical and historical context of Confuciansim from its origins in ancient China through the early empire and beyond. Only one of the following may be counted: Asian Studies 372 (Topic: World of Confucians), 372 (Topic 32), Core Text and Ideas 375 (Topic: World of Confucians), Religious Studies 352 (Topic: World of Confucians), 352 (Topic 10).

**Topic 33: Self-Cultivation in Traditional China.** Same as Religious Studies 352 (Topic 11). Ideas and practices of self-cultivation as represented in diverse philosophical, religious, and occult traditions in premodern China. Only one of the following may be counted: Asian Studies 372 (Topic: Self-Cultivation in Traditional China), 372 (Topic 33), Core Texts and Ideas 375 (Topic: Self-Cultivation in Traditional China), Religious Studies 352 (Topic: Self-Cultivation in Traditional China), 352 (Topic 11).

**Topic 34: Modern Japanese Literature in Translation.** Conducted in English. Analyzes literature written by Japanese authors in the twentieth and twenty-first centuries with attention to a work's content, style, and form, as well as the sociohistorical context of its production and reception. Asian Studies 361 (Topic 9) and 372 (Topic 34) may not both be counted.

Topic 35: Suicide in Japanese Fiction. Conducted in English. Examination of Japanese literary and visual culture, including poetry, novels, plays, film, and manga, to analyze how artists grapple with themes of suicide in their works and lives in response to personal and national tragedies. Only one of the following may be counted: Asian Studies 361 (Topic: Suicide in Japanese Fiction), 372 (Topic 35), Comparative Literature 323 (Topic: Suicide in Japanese Fiction). Topic 36: The Supernatural in Traditional Chinese Fiction. Same as Comparative Literature 323 (Topic 23). Conducted in English. Introduction to Chinese notions of the supernatural and otherworldly phenomena in traditional Chinese literature and pseudohistory. focusing on the literary, cultural, historical, social, political, philosophical, and religious background against which representative works arose. Only one of the following may be counted: Asian Studies 372 (Topic: Supernatural in Traditional Chinese Fiction), 372 (Topic 36), Comparative Literature 323 (Topic: Supernatural in Traditional Chinese Fiction), 323 (Topic 23).

**Topic 37: Taiwan: From Coloniality to Postcoloniality.** Examines how Taiwan has transformed itself since the end of Japanese colonialism in 1945 through literature, films, and other cultural products, such as popular music and arts, in postcolonial Taiwan. Asian Studies 372 (Topic: Taiwan and Cultural Imaginary) and 372 (Topic 37) may not both be counted.

**Topic 38: Living Epics of India.** Same as Comparative Literature 323 (Topic 26) and Religious Studies 341 (Topic 14). Exploration of Indian epics in the Sanskritic textual heritage, performative arts, and regional language versions, and their impact in the formation of the values of the people of India. Only one of the following may be counted: Asian Studies 372 (Topic: Living Epics of India), 372 (Topic 38), Comparative

Literature 323 (Topic: Living Epics of India), 323 (Topic 26), Theatre and Dance 357T (Topic: Living Epics of India), Religious Studies 341 (Topic: Living Epics of India), 341 (Topic 14).

**Topic 39: Modern Indian Literature.** Same as Comparative Literature 323 (Topic 24). Examines modern India through religious literary masterpieces, poems, short stories, essays, and memoirs, and how literature reveals an interconnected history and redefinition of cultural dynamics in everyday Indian life long after colonial rule. Only one of the following may be counted: Anthropology 324L (Topic: Modern India and Literature), Asian Studies 372 (Topic: Modern India and Literature), 372 (Topic 39), Comparative Literature 323 (Topic: Modern India and Literature), 323 (Topic 24).

Topic 40: Epics and Heroes of India. Same as Ancient History and Classical Civilization 330 (Topic 2), Core Texts and Ideas 345 (Topic 11), and History 350L (Topic 54). Only one of the following may be counted: Ancient History and Classical Civilization 330 (Topic: Epics and Heroes of India), 330 (Topic 2), Asian Studies 372 (Topic: Epics and Heroes of India), 372 (Topic 40), Core Texts and Ideas 345 (Topic: Epics and Heroes of India), 345 (Topic 11), History 350L (Topic 54). Topic 41: Japanese Concepts of Body and Self. Same as Anthropology 324L (Topic 69) and Religious Studies 352 (Topic 8). Exploration of anthropological literature describing Japanese conceptions of self and body, and analysis of the intersection of these conceptions of self with Japanese ideas about religion, morality, aging, and medicine. Only one of the following may be counted: Anthropology 324L (Topic: Japanese Concepts of Body and Self), 324L (Topic 69), Asian Studies 372 (Topic: Japanese Concepts of Body and Self), 372 (Topic 41), Religious Studies 352 (Topic: Japanese Concepts of Body and Self), 352 (Topic 8).

**Topic 42: Chinese Literati Art.** Same as Art History 372 (Topic 1). Only one of the following may be counted: Art History 372 (Topic: Chinese Literati Art), 372 (Topic 1), Asian Studies 361 (Topic: Chinese Literati Art), 372 (Topic 42).

**Topic 43: South Asian Migration to the United States.** Same as Asian American Studies 325 (Topic 9), History 365G (Topic 14), and Women's and Gender Studies 340 (Topic 35). Examines the South Asian diaspora in the United States. Only one of the following may be counted: Asian American Studies 325 (Topic: South Asian Migration to the United States), Asian American Studies 325 (Topic 9), Asian Studies 372 (Topic: South Asian Migration to the United States), Asian Studies (Topic 43), History 365G (Topic: South Asian Migration to the United States), History 365G (Topic 14), Women and Gender Studies 340 (Topic: South Asian Migration to the United States), Women and Gender Studies 340 (Topic 35). Additional prerequisite: Upper-division standing.

**Topic 44: Nonconformist Thinkers of India.** Same as Religious Studies 341 (Topic 16). Introduction to Indian philosophy focusing on dissenting voices and the opponents of the mainstream to examine the subversive challenge of their thoughts. Only one of the following may be counted: Asian Studies 372 (Topic: India's Nonconformist Thinkers), 372 (Topic 44), Philosophy 348 (Topic: India's Nonconformist Thinkers), Religious Studies 341 (Topic: India's Nonconformist Thinkers), 341 (Topic 16). Additional prerequisite: Upper-division standing.

**Topic 45: Contemporary Chinese Art.** Same as Art History 349L. Examines Chinese art and visual culture from the early twentieth century to the present. Analyzes complex issues involving modern and contemporary art scenes in China through artworks, artists' lives, and sociopolitical changes in China during this period. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 349L, 372 (Topic: Contemporary Chinese Art), Asian Studies 372 (Topic: Contemporary Chinese Art), 372 (Topic 45). **Topic 46: Gender and Art in the Muslim World.** Same as Islamic Studies 373 (Topic 15), Middle Eastern Languages and Cultures 321 (Topic 31), Middle Eastern Studies 342 (Topic 40), Religious Studies 358 (Topic 20), and Women's and Gender Studies 340 (Topic 62). Only one of the following may be counted: Asian Studies 372 (Topic: Gender and Art in Muslim World), 372 (Topic 46), Islamic Studies 373 (Topic: Gender and Art in Muslim World), 373 (Topic 15), Middle Eastern Languages and Cultures 321 (Topic: Gender and Art in Muslim World), 321 (Topic 31), Middle Eastern Studies 342 (Topic: Gender and Art in Muslim World), 342 (Topic 40), Religious Studies 358 (Topic: Gender and Art in Muslim World), 358 (Topic 20), Women's and Gender Studies 340 (Topic: Gender and Art in Muslim World), 340 (Topic 62). Prerequisite: Upper-division standing.

**Topic 47: Women and Wealth in South Asia**. Same as History 350L (Topic 94) and Women's and Gender Studies 340 (Topic 68). Addresses the questions surrounding poverty of South Asian women by combining legal, political and social histories of the subcontinent over four centuries. Only one of the following may be counted: Asian Studies 372 (Topic: Women and Wealth in South Asia), 372 (Topic 47), History 350L (Topic: Women and Wealth in South Asia), 350L (Topic 94), Women's and Gender Studies 340 (Topic: Women and Wealth in South Asia), 340 (Topic 68).

#### ANS 678H. Honors Tutorial Course.

Three lecture hours a week for two semesters. Prerequisite: For 678HA, admission to the Asian Studies Honors Program; for 678HB, Asian Studies 678HA.

#### ANS 379. Capstone Seminars in Asian Studies.

Three lecture hours a week for one semester; additional hours may be required for some topics. May be repeated for credit when the topics vary. Prerequisite: For Asian studies majors, twelve semester hours of upper-division coursework in Asian studies; for others, upper-division standing; additional prerequisites vary with the topic.

**Topic 1: Writing and Authority in Early China.** Only one of the following may be counted: Asian Studies 372 (Topic: Writing and Authority: Early China), 379 (Topic 1), History 364G (Topic: Writing and Authority: Early China).

**Topic 2: South Asian Saints and Yogis.** Same as Religious Studies 341 (Topic 12). Life stories, teachings, and cultic practices of various holy figures and sainthood practices in South Asia, with an emphasis on the intersection between classical and modern history, religion, literature, and philosophy in relation to these practices and the making of modern South Asia. Only one of the following may be counted: Anthropology 324L (Topic: South Asian Saints and Yogis), Asian Studies 340 (Topic: South Asian Saints and Yogis), 379 (Topic 2), Religious Studies 341 (Topic: South Asian Saints and Yogis), 341 (Topic 12).

**Topic 3: The Art of the Body in India.** Only one of the following may be counted: Anthropology 322M (Topic: Art of the Body in India), Asian Studies 372 (Topic: Art of the Body in India), 379 (Topic 3), and Women's and Gender Studies 340 (Topic: Art of the Body in India). **Topic 4: Indian Poetry and Religions.** Same as Religious Studies 341 (Topic 11). Explores the intersections of religion and poetry in the history of Indian literature as expressed in multiple settings and variations including hymns, chants, bhajans, poetic narratives, and new poetic conventions that deal with caste and gender identities. Only one of the following may be counted: Asian Studies 340 (Topic: Indian Poetry and Religions), 379 (Topic 4), Religious Studies 341 (Topic: Indian Poetry and Religions), 341 (Topic 11).

**Topic 5: Science, Technology, and Society in Contemporary Asia.** Introduction to how social forces and interests impact scientific practice, and vice versa, including scientific incommensurability, cultural difference, colonialism, postcoloniality, and methodological issues. Asian Studies 361 (Topic: Science, Technology and Society in Contemporary Asia) and 379 (Topic 5) may not both be counted. **Topic 6: Transnational Korea.** Same as Asian American Studies 330 (Topic 5). Recent and contemporary manifestations of the Koreas in the world and the world in the Koreas. Subjects include labor and marriage migration, educational sojourning, transnational adoption, tourism, international sport, corporate expatriation, and media flows. Only one of the following may be counted: Anthropology 324L (Topic: Transnational Korea); Asian American Studies 330 (Topic: Transnational Korea), 330 (Topic 5); Asian Studies 379 (Topic: Transnational Korea), 379 (Topic 6).

**Topic 7: Cuisine and Culture in Asia.** Same as Asian American Studies 325 (Topic 6). Explores various themes related to food preparation, distribution, and consumption in the shaping of modern Asian societies, including gender; family; politics and nationalism; political economy of food; immigration; diaspora and cuisine; globalization of food brands and fast food outlets; aesthetics; tourism and travel; and how Asian food is represented in media. Only one of the following may be counted: Asian American Studies 325 (Topic 6); Asian Studies 379 (Topic: Cuisine and Culture in Asia), 379 (Topic 7).

**Topic 8: Radical Religion: Ascetics and Holy Persons.** Same as Religious Studies 375S (Topic 4). Explores asceticism and the concepts, practices, and goals associated with this radical way of life through case studies from various religions. Subjects include theories of the body and of culture, as well as issues of social status, gender, devotion, and violence. Only one of the following may be counted: Asian Studies 379 (Topic: Radical Religion: Ascetics), 379 (Topic 8), Religious Studies 375S (Topic: Radical Religion: Ascetics), 375S (Topic 4).

Topic 9: Art of Autobiography in Japan. Examines autobiographies written by prominent artists and intellectuals in Japan from the tenth century to the present. Subjects include the authors' lives and legacies, and how these works are informed by both the historical and cultural contexts in which they were written and by the genre itself. All reading, writing, and discussion will be in English. Asian Studies 379 (Topic: Art of Autobiography in Japan) and 379 (Topic 9) may not both be counted. Additional prerequisite: Upper-division standing. Topic 10: Comparing Religions. Same as Religious Studies 375S (Topic 2). A discussion of major comparative approaches in the study of religion. Only one of the following may be counted: Asian Studies 340 (Topic: Introduction to Comparative Religion), 340 (Topic 11), 379 (Topic 10), Religious Studies 373 (Topic: Introduction to Comparative Religion), 375S (Topic 2). Additional prerequisite: For Asian studies majors, twelve semester hours of upper-division coursework in Asian studies; for others, upper-division standing and at least six semester hours of coursework in religious studies.

#### ANS 379H. Honors Tutorial Course.

Supervised research, readings, and writing of a substantial paper on a particular Asian topic. Conference course. Prerequisite: Upper-division standing, admission to the Asian Studies Honors Program no later than two semesters before expected graduation, a University grade point average of at least 3.00, and a grade point average in Asian studies of at least 3.50.

## **Bengali: BEN**

### **Lower-Division Courses**

#### BEN 506. First-Year Bengali I.

Not open to native speakers of Bengali. Five class hours a week for one semester.

#### BEN 507. First-Year Bengali II.

Not open to native speakers of Bengali. Continuation of Bengali 506. Five class hours a week for one semester. Prerequisite: Bengali 506 with a grade of at least C.

#### BEN 312K. Second-Year Bengali I.

Not open to native speakers of Bengali. Three class hours a week for one semester. Prerequisite: Bengali 507 with a grade of at least C.

#### BEN 312L. Second-Year Bengali II.

Not open to native speakers of Bengali. Continuation of Bengali 312K. Three class hours a week for one semester. Prerequisite: Bengali 312K with a grade of at least C.

#### BEN 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Bengali.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Asian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

## **Upper-Division Courses**

#### BEN 320K. Advanced Bengali I.

Not open to native speakers of Bengali. Three class hours a week for one semester. Prerequisite: Bengali 312L with a grade of at least C.

#### BEN 320L. Advanced Bengali II.

Not open to native speakers of Bengali. Continuation of Bengali 320K. Three class hours a week for one semester. Prerequisite: Bengali 320K with a grade of at least C.

#### BEN 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Bengali.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Asian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

## BEN 360. Conference Course in Bengali Language and Literature.

Supervised individual study of selected problems in Bengali language and literature. Conference course. May be repeated for credit. Prerequisite: Upper-division standing and written consent of instructor on form obtained from the undergraduate adviser.

## **Chinese: CHI**

### **Lower-Division Courses**

#### CHI 604. Accelerated First-Year Chinese.

Designed for students who understand or speak but do not read or write Mandarin Chinese. Six class hours a week for one semester. Chinese 604 and 506 may not both be counted; Chinese 604 and 507 may not both be counted. Prerequisite: Results on the placement examination in Chinese that indicate that the student is ineligible to receive credit for Chinese 507. If the student is eligible to receive credit by examination for Chinese 506, this credit must not appear on the student's record.

#### CHI 506, 606. First-Year Chinese I.

Modern Standard Chinese (Mandarin). Intended for students who do not understand or speak Mandarin Chinese. Six lecture hours a week for one semester. Chinese 604 and 506, 606 may not both be counted.

#### CHI 507, 607. First-Year Chinese II.

Continuation of Chinese 506, 606. Intended for non-native speakers of Chinese. Six lecture hours a week for one semester. Chinese 604 and 507, 607 may not both be counted. Prerequisite: Chinese 506, 606 with a grade of at least C.

#### CHI 612. Accelerated Second-Year Chinese.

Continuation of Chinese 604. Six class hours a week for one semester. Chinese 612 and 412K may not both be counted; Chinese 612 and 412L may not both be counted. Prerequisite: Chinese 604 with a grade of at least C.

#### CHI 312K, 412K. Second-Year Chinese I.

Modern Standard Chinese (Mandarin). Intended for non-native speakers of Chinese. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. Chinese 612 and 312K, 412K may not both be counted. Prerequisite: Chinese 507, 607 with a grade of at least C.

#### CHI 312L, 412L. Second-Year Chinese II.

Intended for non-native speakers of Chinese. Continuation of Chinese 312K, 412K. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. Chinese 612 and 312L, 412L may not both be counted. Prerequisite: Chinese 312K, 412K with a grade of at least C.

#### CHI 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Chinese.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Asian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### **Upper-Division Courses**

#### CHI 320K. Readings in Modern Chinese I.

Readings in expository prose: selections from journals, newspapers, and other sources. Three lecture hours a week for one semester. Prerequisite: Chinese 612 or 412L with a grade of at least C.

#### CHI 320L. Readings in Modern Chinese II.

Readings in modern fiction, poetry, and drama. Three lecture hours a week for one semester. Prerequisite: Chinese 320K with a grade of at least C.

#### CHI 322. Introduction to Classical Chinese.

Beginning study of wen yen, the particles, and syntax of the Chinese classics. Three lecture hours a week for one semester. Prerequisite: Chinese 612 or 412L with a grade of at least C.

#### CHI 325K. Advanced Conversation I.

Not open to native speakers of Chinese. Drill in conversation on general topics. Three lecture hours a week for one semester. Prerequisite: Chinese 412L with a grade of at least C.

#### CHI 325L. Advanced Conversation II.

Not open to native speakers of Chinese. Practice in speaking Modern Standard Chinese. Three lecture hours a week for one semester. Prerequisite: Chinese 325K with a grade of at least C.

#### CHI 326. Business Chinese.

Advanced Chinese conversation, with emphasis on business vocabulary. Three lecture hours a week for one semester. Chinese 326 and 330 (Topic: Business Chinese) may not both be counted. Prerequisite: Chinese 612, 320K, or 325K with a grade of at least C.

#### CHI 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Chinese.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Asian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### CHI 330. Topics in Advanced Chinese.

Fourth-year Chinese readings on special topics. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Chinese 320K and 320L with a grade of at least C in each.

#### CHI 130D. Chinese across Disciplines.

Reading and discussion of Chinese language materials related to the subject matter of another designated course in Asian studies. Meetings with the instructor will be devoted to the discussion of linguistic problems, literary features, and crucial passages. Individual instruction. May not be counted toward fulfillment of the foreign language requirement for any bachelor's degree. May be repeated for credit. Offered on the pass/fail basis only. Prerequisite: Upperdivision standing, concurrent enrollment in an appropriate Asian studies course, and written consent of instructor on form obtained from the undergraduate adviser.

#### CHI 340. Topics in Chinese Literature.

Study of Chinese literary texts in the original. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Chinese 320L with a grade of at least C.

Topic 1: Contemporary Chinese Literature. Selected literary works from contemporary China (post 1949), in their original language. Focuses on translation and linguistic analysis, as well as discussion of the texts as works of literature. Chinese 340 (Topic: Contemporary Chinese Literature) and 340 (Topic 1) may not both be counted. Topic 2: Prose Writings by Lu Xun. Chinese 340 (Topic: Prose Writings by Lu Xun) and 340 (Topic 2) may not both be counted. Topic 3: Modern Chinese Literature. Selected literary works from modern China (pre 1949), focusing on translation, linguistic analysis. and discussion of these works as cultural and literary products within their socio-historical contexts. Chinese 340 (Topic: Modern Chinese Literature) and 340 (Topic 3) may not both be counted. Topic 4: Chinese Fiction from Taiwan. Readings of works of fiction produced in contemporary Taiwan (1949 to present day) in Chinese. Readings include mainstream literature, stories written by writers of the Modernist and Nativist schools, and urban fiction since the late twentieth century. Chinese 340 (Topic: Chinese Fiction from Taiwan) and 340 (Topic 4) may not both be counted.

#### CHI 341. Classical Chinese Poetry.

Study of Chinese poetry in the original. Three lecture hours a week for one semester. Chinese 340 (Topic: Classical Chinese Poetry) and 341 may not both be counted. Prerequisite: Chinese 320L with a grade of at least C.

## CHI 350. Advanced Readings in Literary and Vernacular Chinese.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Chinese 320L.

## CHI 360. Conference Course in Chinese Language and Literature.

Supervised individual study of selected problems in Chinese language or literature. Conference course. May be repeated for credit. Prerequisite: Upper-division standing and written consent of instructor on form obtained from the undergraduate adviser.

## Hindi: HIN

## **Lower-Division Courses**

#### HIN 604. Accelerated First-Year Hindi.

For speakers of Hindi who have not studied it formally. Six lecture hours a week for one semester. Hindi 604 and 506 may not both be counted; Hindi 604 and 507 may not both be counted; Hindi 604 and Urdu 604 may not both be counted; Hindi 604 and Urdu 506 may not both be counted; Hindi 604 and Urdu 507 may not both be counted.

#### HIN 506. First-Year Hindi I.

Not open to native speakers of Hindi. Modern Hindi of India. Five class hours a week for one semester. Hindi 604 and 506 may not both be counted; Hindi 506 and Urdu 604 may not both be counted.

#### HIN 507. First-Year Hindi II.

Not open to native speakers of Hindi. Continuation of Hindi 506. Five class hours a week for one semester. Hindi 604 and 507 may not both be counted; Hindi 507 and Urdu 604 may not both be counted. Prerequisite: Hindi 506 with a grade of at least C.

#### HIN 612. Accelerated Second-Year Hindi.

Continuation of Hindi 604. Six lecture hours a week for one semester. Hindi 612 and 312K may not both be counted; Hindi 612 and 312L may not both be counted. Prerequisite: Hindi 604 with a grade of at least C.

#### HIN 312K. Second-Year Hindi I.

Not open to native speakers of Hindi. Modern Hindi of India. Three lecture hours a week for one semester. Hindi 612 and 312K may not both be counted. Prerequisite: Hindi 507 with a grade of at least C.

#### HIN 312L. Second-Year Hindi II.

Not open to native speakers of Hindi. Continuation of Hindi 312K. Three lecture hours a week for one semester. Hindi 612 and 312L may not both be counted. Prerequisite: Hindi 312K with a grade of at least C.

#### HIN 118. Practice in Spoken Hindi.

Not open to native speakers of Hindi. Instruction and practice in conversation for intermediate-level students. Two lecture hours a week for one semester. Prerequisite: Hindi 507 with a grade of at least C.

#### HIN 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Hindi.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser of the Department of Asian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

## **Upper-Division Courses**

#### HIN 125. Advanced Practice in Spoken Hindi.

Instruction and practice in conversation for advanced students. Two lecture hours a week for one semester. Prerequisite: Hindi 118 with a grade of at least C.

## HIN 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Hindi.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Asian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in affiliated studies program. May be repeated for credit when the topics vary.

#### HIN 330. Topics in Hindi Language and Literature.

Study of specific subjects related to Hindi culture as reflected in its literary productions and other modes of expression. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Hindi 312L with a grade of at least C.

**Topic 1: Contemporary Hindi Narratives.** Designed to enhance all four language skills: reading, writing, speaking, and listening. Hindi 330 (Topic 1) and 384 (Topic 4: Contemporary Hindi Narratives) may not both be counted.

**Topic 2: Hindi Drama and Film.** Contemporary Hindi plays and film scripts in Devanagari script. Hindi 330 (Topic 2) and 384 (Topic 5: Hindi Drama and Film) may not both be counted.

**Topic 3: Hindi Literature in the Nationalist Era.** Examines the poetry and prose of a diverse group of writers who shaped Hindi literature during the nationalist era. Also includes critical studies in English. Hindi 330 (Topic 3) and 384 (Topic 6: Hindi Literature in the Nationalist Era) may not both be counted.

**Topic 4: Language and Identity at the Margins of Hindi Fiction.** Focuses on the stories and novels of a diverse group of writers, including Muslims, women, Biharis, and Marwaris, who have broadened the landscape of Hindi writing. Hindi 330 (Topic 4) and 384 (Topic 7: Language and Identity at the Margins of Hindi Fiction) may not both be counted.

**Topic 5: Autobiography in Hindi.** Hindi 330 (Topic: Autobiography in Hindi) and 330 (Topic 5) may not both be counted.

#### HIN 130D. Hindi Across Disciplines.

Reading and discussion of Hindi language materials related to the subject matter of another designated course in Asian studies, with a focus on linguistic and literary features, and crucial passages. One lecture hour a week for one semester. May not be counted toward fulfillment of the foreign language requirement for any bachelor's degree. May be repeated for credit. Prerequisite: Registration for an appropriate Asian studies course, and written consent of instructor on a form obtained from the undergraduate adviser.

#### HIN 332. Style and Register in Hindi.

Practicing skills in reading, listening, writing, and speaking in everyday social situations and some formal situations. Relevant for students working toward the "Advanced" level on the American Council for the Teaching of Foreign Languages (ACTFL) proficiency scale, and equivalent to level two on the Interagency Language Roundtable (ILR) scale. Three lecture hours a week for one semester. Hindi 330 (Topic: Style and Register in Hindi) and 332 may not both be counted. Prerequisite: Hindi 312L with a grade of at least C.

#### HIN 434K, 534K, 634K. Flagship Hindi VII.

For each semester hour of credit earned, one lecture hour a week for one semester. Prerequisite: Consent of instructor.

#### HIN 434L, 534L, 634L. Flagship Hindi VIII.

For each semester hour of credit earned, one lecture hour a week for one semester. Prerequisite: Consent of instructor.

## HIN 360. Conference Course in Hindi Language and Literature.

Supervised individual study of selected problems in Hindi language and literature. Conference course. May be repeated for credit. Prerequisite: Upper-division standing and written consent of instructor on form obtained from the undergraduate adviser.

## Japanese: JPN

### **Lower-Division Courses**

#### JPN 601D. Japanese I.

Not open to native speakers of Japanese. Designed for students with no previous coursework in Japanese. Emphasis on basic skills in listening and speaking Japanese and in reading and writing hiragana, katakana, and kanji. Introduction to Japanese culture. Includes computer-assisted instruction. Six lecture hours a week for one semester. Japanese 601D and 506 may not both be counted.

#### JPN 506 (TCCN: JAPN 1511). First-Year Japanese I.

Not open to native speakers of Japanese. Six class hours a week for one semester. Japanese 601D and 506 may not both be counted.

#### JPN 507 (TCCN: JAPN 1512). First-Year Japanese II.

Not open to native speakers of Japanese. Six class hours a week for one semester. Japanese 507 and 610D may not both be counted. Prerequisite: Japanese 506 with a grade of at least C.

#### JPN 610D. Japanese II.

Not open to native speakers of Japanese. Expands on skills acquired in Japanese 601D. Includes computer-assisted instruction. Six lecture hours a week for one semester. Japanese 507 and 610D may not both be counted. Prerequisite: Japanese 601D with a grade of at least C.

#### JPN 611D. Intermediate Japanese.

Not open to native speakers of Japanese. Intermediate level of competency in Japanese to enable students to function in a variety of real-life contexts. Six lecture hours a week for one semester. Japanese 611D and 412K may not both be counted. Japanese 611D and 412L may not both be counted. Prerequisite: Japanese 610D with a grade of at least C.

#### JPN 412K. Second-Year Japanese I.

Not open to native speakers of Japanese. Five class hours a week for one semester. Japanese 611D and 412K may not both be counted. Prerequisite: Japanese 507 or the equivalent with a grade of at least C.

#### JPN 412L. Second-Year Japanese II.

Not open to native speakers of Japanese. Five class hours a week for one semester. Japanese 611D and 412L may not both be counted. Japanese 412L and 317C may not both be counted. Prerequisite: Japanese 412K or the equivalent with a grade of at least C.

## JPN 317C. Japanese Grammar, Composition, and Conversation.

Not open to native speakers of Japanese. Designed to prepare students for specialized advanced Japanese language courses. Three lecture

hours a week for one semester. Japanese 412L and 317C may not both be counted. Prerequisite: Japanese 611D with a grade of at least C.

#### JPN 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Japanese.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Asian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

## **Upper-Division Courses**

#### JPN 320K. Readings in Modern Japanese I.

Not open to native speakers of Japanese. Exploration of different types of texts written in a variety of grammar structures with rich vocabulary. Examination of similarities and differences between various aspects of Japanese culture and the student's own culture. Three lecture hours a week for one semester. Prerequisite: Japanese 412L or 317C with a grade of at least C.

#### JPN 320L. Readings in Modern Japanese II.

Not open to native speakers of Japanese. Continued development of Japanese reading and comprehension skills using authentic print and web-based resources. Three lecture hours a week for one semester. Prerequisite: Japanese 320K with a grade of at least C.

#### JPN 322. Classical Japanese.

An introduction to the principal elements of premodern literary or "classical" Japanese (bungo), the standard form of the written language. A survey of the principal linguistic features, close reading, and translation of a variety of prose and poetry texts. Three lecture hours a week for one semester. Prerequisite: Japanese 320L with a grade of at least C.

#### JPN 325K. Advanced Conversation I.

Not open to native speakers of Japanese. Conversations on more complex situations and topics, including formal and informal contexts; designed to continue students' development of conversation skills taught in Japanese 412L and 317C. Three lecture hours a week for one semester. Prerequisite: Japanese 412L or 317C with a grade of at least C.

#### JPN 325L. Advanced Conversation II.

Not open to native speakers of Japanese. Continued development of conversation skills taught in Japanese 325K. Three lecture hours a week for one semester. Prerequisite: Japanese 325K with a grade of at least C.

#### JPN 326. Business Japanese.

Not open to native speakers of Japanese. Development of basic business manners and business-related vocabulary and conversation skills appropriate in an office environment. Three lecture hours a week for one semester. Prerequisite: Japanese 412L or 317C with a grade of at least C.

#### JPN 327. Advanced Reading and Writing of Kanji Characters.

Not open to native speakers of Japanese. Building more advanced vocabulary and kanji knowledge through systematic study (recognition, reading, and writing) of kanji. Three lecture hours a week for one semester. Prerequisite: Japanese 412L or 317C with a grade of at least C.

#### JPN 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Japanese.

Not open to native speakers of Japanese. This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Asian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### JPN 330. Topics in Advanced Japanese.

Not open to native speakers of Japanese. Fourth-year Japanese readings on special topics. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Japanese 320L with a grade of at least C.

Topic 1: Intensive Advanced Japanese Language: Japan. Taught in Japan in Japanese. Emphasizes reading skills and conversation. Topic 2: Advanced Readings in Newspaper Articles. For students with an advanced level of proficiency in Japanese. Conducted in Japanese. Readings from newspaper articles and other authentic materials, including short stories and websites, selected to expand linguistic and social knowledge, vocabulary, and knowledge of kanji.

**Topic 3: Practical Readings in Advanced Japanese.** For students with an advanced level of proficiency in Japanese. Conducted in Japanese. Readings selected to promote a wide variety of reading skills such as scanning, skimming, prediction, reading for details, and reading for meaning. Readings include essays, comic strips, short stories, websites, magazine and newspaper articles, and other authentic materials.

**Topic 4: Reading Japanese Literature.** Japanese 330 (Topic: Reading Japanese Literature) and 330 (Topic 4) may not both be counted.

#### JPN 130D. Japanese across Disciplines.

Reading and discussion of Japanese language materials related to the subject matter of another designated course in Asian studies. Meetings with the instructor will be devoted to the discussion of linguistic problems, literary features, and crucial passages. Individual instruction. May not be counted toward fulfillment of the foreign language requirement for any bachelor's degree. May be repeated for credit. Offered on the pass/fail basis only. Prerequisite: Upperdivision standing, concurrent enrollment in an appropriate Asian studies course, and written consent of instructor on form obtained from the undergraduate adviser.

## JPN 360. Conference Course in Japanese Language and Literature.

Not open to native speakers of Japanese. Supervised individual study of selected problems in Japanese language or literature. Conference course. May be repeated for credit. Prerequisite: Upper-division standing, six semester hours of upper-division coursework in Japanese, and written consent of instructor on form obtained from the undergraduate adviser.

## Korean: KOR

#### **Lower-Division Courses**

#### KOR 604. Accelerated First-Year Korean.

Designed for students who understand or speak but do not read or write Korean. Not open to native speakers of Korean. Six class hours a week for one semester. Korean 604 and 506 may not both be counted; Korean 604 and 507 may not both be counted.

#### KOR 506, 606. First-Year Korean I.

Intended for non-native speakers of Korean. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. Korean 604 and 506, 606 may not both be counted.

#### KOR 507, 607. First-Year Korean II.

Continuation of Korean 506, 606. Intended for non-native speakers of Korean. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. Korean 604 and 507, 607 may not both be counted. Prerequisite: Korean 506, 606 with a grade of at least C.

#### KOR 612. Accelerated Second-Year Korean.

Not open to native speakers of Korean. Continuation of Korean 604. Six class hours a week for one semester. Korean 612 and 412K may not both be counted; Korean 612 and 412L may not both be counted. Prerequisite: Korean 604 with a grade of at least C.

#### KOR 312K, 412K. Second-Year Korean I.

Intended for non-native speakers of Korean. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. Korean 612 and 312K, 412K may not both be counted. Prerequisite: Korean 507, 607 with a grade of at least C.

#### KOR 312L, 412L. Second-Year Korean II.

Intended for non-native speakers of Korean. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. Korean 612 and 312L, 412L may not both be counted. Prerequisite: Korean 312K, 412K with a grade of at least C.

#### KOR 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Korean.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Asian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

## **Upper-Division Courses**

#### KOR 320K. Third-Year Korean I.

Three lecture hours a week for one semester. Prerequisite: Korean 612 or 412L with a grade of at least C.

#### KOR 320L. Third-Year Korean II.

Three lecture hours a week for one semester. Prerequisite: Korean 320K with a grade of at least C.

## KOR 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Korean.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Asian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### KOR 330. Topics in Advanced Korean.

Fourth-year Korean readings on special topics. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Korean 320L with a grade of at least C.

**Topic 1: Advanced Conversation in Korean**. Emphasis on achieving an advanced level of proficiency in modern conversational Korean, with additional practice in advanced writing and listening skills. Korean 330 (Topic: Advanced Conversation) and 330 (Topic 1) may not both be counted.

Topic 2: Advanced Readings in Korean I. Selected modern Korean poems, short stories, and essays to develop reading and writing skills

in advanced Korean. Includes discussion of cultural and historical issues. Korean 330 (Topic: Readings in Advanced Korean I) and 330 (Topic 2) may not both be counted.

## KOR 360. Conference Course in Korean Language and Literature.

Supervised individual study of selected problems in Korean language or literature. Conference course. May be repeated for credit. Prerequisite: Korean 412K and written consent of instructor on form obtained from the undergraduate adviser.

## Malayalam: MAL

#### **Lower-Division Courses**

#### MAL 506. First-Year Malayalam I.

Standard Malayalam of Kerala. Five class hours a week for one semester.

#### MAL 507. First-Year Malayalam II.

Five class hours a week for one semester. Prerequisite: Malayalam 506 with a grade of at least C.

#### MAL 312K. Second-Year Malayalam I.

Three lecture hours a week for one semester. Prerequisite: Malayalam 507 with a grade of at least C.

#### MAL 312L. Second-Year Malayalam II.

Three lecture hours a week for one semester. Prerequisite: Malayalam 312K with a grade of at least C.

#### MAL 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Malayalam.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Asian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### MAL 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Malayalam.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser for the Department of Asian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### MAL 330. Topics in Malayalam Language and Literature.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Malayalam 312L with a grade of at least C.

## MAL 360. Conference Course in Malayalam Language and Literature.

Supervised individual study of selected problems in Malayalam language or literature. Conference course. May be repeated for credit. Prerequisite: Malayalam 312L and written consent of instructor on form obtained from the undergraduate adviser.

## Pashto: PSH

### **Lower-Division Courses**

#### PSH 506. First-Year Pashto I.

Not open to native speakers of Pashto. Emphasis on basic skills: listening, speaking, reading, and writing. Five lecture hours a week for one semester.

#### PSH 507. First-Year Pashto II.

Not open to native speakers of Pashto. Continuation of Pashto 506, with emphasis on basic skills: listening, speaking, reading, and writing. Five lecture hours a week for one semester. Prerequisite: Pashto 506 with a grade of at least C.

#### PSH 312K. Second-Year Pashto I.

Not open to native speakers of Pashto. Listening, speaking, reading, and writing skills in Pashto at the second-year level. Three lecture hours a week for one semester. Prerequisite: Pashto 507 with a grade of at least C.

#### PSH 312L. Second-Year Pashto II.

Not open to native speakers of Pashto. Listening, speaking, reading, and writing Pashto at the advanced second-year level. Three lecture hours a week for one semester. Prerequisite: Pashto 312K with a grade of at least C.

#### PSH 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Pashto.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Asian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

## **Upper-Division Courses**

#### PSH 320K. Readings in Modern Pashto I.

Readings in expository prose: selections from journals, newspapers, and other sources. Three lecture hours a week for one semester. Prerequisite: Pashto 312L with a grade of at least C.

#### PSH 320L. Readings in Modern Pashto II.

Readings in modern fiction, poetry, and drama. Three lecture hours a week for one semester. Prerequisite: Pashto 320K with a grade of at least C.

## PSH 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Pashto.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Asian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### PSH 330. Topics in Advanced Pashto.

Fourth-year Pashto readings on special topics. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Pashto 320K and 320L with a grade of at least C in each.

## Sanskrit: SAN

## **Lower-Division Courses**

## SAN 506. First-Year Sanskrit I.

Introduction to basic grammatical principles, with reading of Ramayana episodes as illustrations. Five class hours a week for one semester.

### SAN 507. First-Year Sanskrit II.

Detailed study of problems of grammar and syntax; reading of extracts from Hitopadesha and the Bhagavad Gita. Five class hours a week for one semester. Prerequisite: Sanskrit 506 with a grade of at least C.

### SAN 312K. Second-Year Sanskrit I.

Introduction to classical Sanskrit prose literature; readings from the Epics and Kathasaritsagara. Three lecture hours a week for one semester. Prerequisite: Sanskrit 507 with a grade of at least C.

## SAN 312L. Second-Year Sanskrit II.

Introduction to classical Sanskrit poetry and philosophical literature; readings from the Upanishads and Kalidasa's Meghaduta. Three lecture hours a week for one semester. Prerequisite: Sanskrit 312K with a grade of at least C.

#### SAN 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Sanskrit.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Asian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

## **Upper-Division Courses**

## SAN 325K. Advanced Sanskrit Readings and Composition I.

Three lecture hours a week for one semester. Prerequisite: Sanskrit 312L with a grade of at least C.

## SAN 325L. Advanced Sanskrit Readings and Composition II.

Three lecture hours a week for one semester. Prerequisite: Sanskrit 325K with a grade of at least C.

#### SAN 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Sanskrit.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Asian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer work is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

## SAN 330. Topics in Sanskrit Language and Literature.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Sanskrit 312L with a grade of at least C.

**Topic 1: Sanskrit Drama.** Provides students with a firmer foundation in Sanskrit grammar, syntax, and vocabulary; and an appreciation of the aesthetics of Sanskrit drama. Sanskrit 330 (Topic: Sanskrit Drama) and 330 (Topic 1) may not both be counted.

**Topic 2: Vedic Poetry.** Religious and literary features of Vedic poetry, the development of Vedic Sanskrit, and the relation of Vedic to

Classical Sanskrit. Sanskrit 330 (Topic: Vedic Poetry) and 330 (Topic 2) may not both be counted.

## SAN 360. Conference Course in Sanskrit Language and Literature.

Supervised individual study of selected problems in Sanskrit language or literature. Conference course. May be repeated for credit. Prerequisite: Upper-division standing, Sanskrit 312L, and written consent of instructor on form obtained from the undergraduate adviser.

## South Asian Languages: SAL

## **Lower-Division Courses**

### SAL 506. First-Year South Asian Languages I.

Emphasis on four-skills proficiency: listening, speaking, reading, and writing. Five lecture hours a week for one semester. May be repeated for credit when the topics vary.

### SAL 507. First-Year South Asian Languages II.

Emphasis on four-skills proficiency: listening, speaking, reading, and writing. Five lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: South Asian Languages 506 with a grade of at least C.

### SAL 312K. Second-Year South Asian Languages I.

Listening, speaking, reading, and writing at the second-year level. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: South Asian Languages 507 with a grade of at least C.

### SAL 312L. Second-Year South Asian Languages II.

Listening, speaking, reading, and writing at the advanced, second-year level. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: South Asian Languages 312K with a grade of at least C.

## Upper-Division Courses Tamil: TAM

## **Lower-Division Courses**

## TAM 604. Accelerated First-Year Tamil.

Not open to native speakers of Tamil. Designed for students who understand or speak but do not read or write Tamil. Six class hours a week for one semester. Tamil 604 and 506 may not both be counted; Tamil 604 and 507 may not both be counted.

## TAM 506. First-Year Tamil I.

Not open to native speakers of Tamil. Five lecture hours a week for one semester. Tamil 506 and 604 may not both be counted.

## TAM 507. First-Year Tamil II.

Not open to native speakers of Tamil. Five lecture hours a week for one semester. Tamil 604 and 507 may not both be counted. Prerequisite: Tamil 506 with a grade of at least C.

### TAM 612. Accelerated Second-Year Tamil.

Not open to native speakers of Tamil. Continuation of Tamil 604. Designed for students who understand or speak but do not read or write Tamil. Six class hours a week for one semester. Tamil 612 and 312K may not both be counted; Tamil 612 and 312L may not both be counted. Prerequisite: Tamil 604 with a grade of at least C.

#### TAM 312K. Second-Year Tamil I.

Not open to native speakers of Tamil. Three lecture hours a week for one semester. Tamil 612 and 312K may not both be counted. Prerequisite: Tamil 507 with a grade of at least C.

#### TAM 312L. Second-Year Tamil II.

Not open to native speakers of Tamil. Three lecture hours a week for one semester. Tamil 612 and 312L may not both be counted. Prerequisite: Tamil 312K with a grade of at least C.

### **Upper-Division Courses**

#### TAM 320K. Advanced Tamil I.

Not open to native speakers of Tamil. Three lecture hours a week for one semester. Prerequisite: Tamil 312L with a grade of at least C.

#### TAM 320L. Advanced Tamil II.

Not open to native speakers of Tamil. Three lecture hours a week for one semester. Prerequisite: Tamil 320K with a grade of at least C.

#### TAM 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Tamil.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Asian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### TAM 330. Topics in Tamil Language and Literature.

Not open to native speakers of Tamil. Study of specific subjects related to South Asian culture as reflected in Tamil literary productions and other modes of expression. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Tamil 312L with a grade of at least C.

## TAM 360. Conference Course in Tamil Language and Literature.

Supervised individual study of selected problems in Tamil language and literature. Conference course. May be repeated for credit. Prerequisite: Upper-division standing and written consent of instructor on form obtained from the undergraduate adviser.

## **Telugu: TEL**

#### **Lower-Division Courses**

#### TEL 604. Accelerated First-Year Telugu.

Six lecture hours a week for one semester. Telugu 604 and 506 may not both be counted; Telugu 604 and 507 may not both be counted.

#### TEL 506. First-Year Telugu I.

Not open to native speakers of Telugu. Five class hours a week for one semester. Telugu 604 and 506 may not both be counted.

#### TEL 507. First-Year Telugu II.

Not open to native speakers of Telugu. Five class hours a week for one semester. Telugu 604 and 507 may not both be counted. Prerequisite: Telugu 506 with a grade of at least C.

#### TEL 612. Accelerated Second-Year Telugu.

Continuation of Telugu 604. Six lecture hours a week for one semester. Telugu 612 and 312K may not both be counted; Telugu 612 and 312L may not both be counted. Prerequisite: Telugu 604.

#### TEL 312K. Second-Year Telugu I.

Not open to native speakers of Telugu. Three lecture hours a week for one semester. Telugu 612 and 312K may not both be counted. Prerequisite: Telugu 507 with a grade of at least C.

#### TEL 312L. Second-Year Telugu II.

Not open to native speakers of Telugu. Three lecture hours a week for one semester. Telugu 612 and 312L may not both be counted. Prerequisite: Telugu 312K with a grade of at least C.

#### TEL 118K. Practice in Spoken Telugu.

Not open to native speakers of Telugu. Instruction and practice in conversation for intermediate-level students. Two lecture hours a week for one semester. Prerequisite: Telugu 507 with a grade of at least C.

#### TEL 118L. Practice in Spoken Telugu II.

Not open to native speakers of Telugu. Instruction and practice in conversation for intermediate-level students. Two lecture hours a week for one semester. Prerequisite: Telugu 312K or 118K with a grade of at least C.

### **Upper-Division Courses**

## TEL 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Telugu.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Asian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### TEL 330. Telugu Language and Literature.

Three lecture hours a week for one semester. Prerequisite: Telugu 312L with a grade of at least C.

## TEL 360. Conference Course in Telugu Language and Literature.

Individual instruction. May be repeated for credit. Prerequisite: Upperdivision standing and written consent of instructor on form obtained from the undergraduate adviser.

## Urdu: URD

### **Lower-Division Courses**

#### URD 604. Accelerated First-Year Urdu.

Designed for students who have some knowledge of spoken Urdu but have not studied Urdu formally. Six lecture hours a week for one semester. Hindi 604 and Urdu 604 may not both be counted; Hindi 506 and Urdu 604 may not both be counted; Hindi 507 and Urdu 604 may not both be counted; Urdu 604 and 506 may not both be counted; Urdu 604 and 507 may not both be counted.

#### URD 506. First-Year Urdu I.

Not open to native speakers of Urdu. Five class hours a week for one semester. Urdu 604 and 506 may not both be counted.

#### URD 507. First-Year Urdu II.

Not open to native speakers of Urdu. Five class hours a week for one semester. Urdu 604 and 507 may not both be counted. Prerequisite: Urdu 506 with a grade of at least C.

#### URD 612. Accelerated Second-Year Urdu.

Continuation of Urdu 604. Six lecture hours a week for one semester. Urdu 612 and 312K may not both be counted; Urdu 612 and 312L may not both be counted. Prerequisite: Urdu 604 with a grade of at least C.

#### URD 312K. Second-Year Urdu I.

Not open to native speakers of Urdu. Introduction to the Urdu script, followed by Urdu reading, composition, and conversation. Three lecture hours a week for one semester. Urdu 612 and 312K may not both be counted. Prerequisite: Urdu 507 with a grade of at least C.

#### URD 312L. Second-Year Urdu II.

Not open to native speakers of Urdu. Continuation of Urdu 312K. Three lecture hours a week for one semester. Urdu 612 and 312L may not both be counted. Prerequisite: Urdu 312K with a grade of at least C.

#### URD 118K. Practice in Spoken Urdu I.

Not open to native speakers of Urdu. Instruction and practice in conversation for intermediate-level students. Two lecture hours a week for one semester. Prerequisite: Urdu 507 with a grade of at least C.

#### URD 118L. Practice in Spoken Urdu II.

Not open to native speakers of Urdu. Two lecture hours a week for one semester. Prerequisite: Urdu 118K with a grade of at least C.

### **Upper-Division Courses**

## URD 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Urdu.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Asian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### URD 330. Topics in Urdu Language and Literature.

Study of specific subjects related to Urdu culture as reflected in literary productions and other modes of expression. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Urdu 312L with a grade of at least C.

Topic 1: Female Voices in Urdu Literature. Survey of prose and poetry written in Urdu by women during the last three centuries. Only one of the following may be counted: Religious Studies 341 (Topic: Female Voices in Urdu Literature), Urdu 330 (Topic 1), 384 (Topic 4). Topic 2: Love and Devotion in Urdu Literature. Examination of various literary genres that are shaped by discourses on the love of God and devotion to the prophet Muhammad. Urdu 330 (Topic 2) and 384 (Topic 5) may not both be counted.

**Topic 3: Philosophy and Poetry of Iqbal.** Explores the prose and poetry written by the most influential twentieth-century Muslim reformer in South Asia, Muhammad Iqbal. Urdu 330 (Topic 3) and 384 (Topic 6) may not both be counted.

**Topic 4: Urdu Aesthetics.** Intensive overview of the most popular lyrical genre of Urdu poetry, the ghazal, and the standards used to judge a good ghazal. Urdu 330 (Topic 4) and 384 (Topic 7) may not both be counted.

**Topic 5: Urdu Short Stories: Manto.** Survey of the writings of Sadat Hasan Manto. Primary texts in Urdu, secondary materials in English. Urdu 330 (Topic: Urdu Short Stories: Manto) and 330 (Topic 5) may not both be counted.

**Topic 6: Qawwali Aesthetics.** Examination of the devotional currency of Qawwali, and issues of gender, class, religious differences, and nationalism. Explores the relationship between oral and written

literature and tensions between local aesthetics and the process of globalization. Urdu 330 (Topic: Qawwali Aesthetics) and 330 (Topic 6) may not both be counted.

**Topic 7: Partition in Literature and Film.** Urdu 330 (Topic: Partition in Literature and Film) and 330 (Topic 7) may not both be counted.

#### URD 130D. Urdu Across Disciplines.

Reading of Urdu language materials related to the subject matter of another designated course in Asian studies. One lecture hour a week for one semester. May not be counted toward fulfillment of the foreign language requirement for any bachelor's degree. May be repeated for credit. Prerequisite: Registration for an appropriate Asian studies course, and written consent of instructor on form obtained from the undergraduate adviser.

#### URD 332. Style and Register in Urdu.

Practice of skills in reading, listening, writing, and speaking for everyday social situations and some formal situations. Relevant to students working toward the "Advanced" level on the American Council for the Teaching of Foreign Languages (ACTFL) proficiency scale, equivalent to level 2 on the Interagency Language Roundtable (ILR) scale. Three lecture hours a week for one semester. Urdu 330 (Topic: Style and Register in Urdu) and 332 may not both be counted. Prerequisite: Urdu 312L with a grade of at least C.

#### URD 434K, 534K, 634K. Flagship Urdu VII.

For each semester hour of credit earned, one lecture hour a week for one semester. Prerequisite: Consent of instructor.

#### URD 434L, 534L, 634L. Flagship Urdu VIII.

For each semester hour of credit earned, one lecture hour a week for one semester. Prerequisite: Consent of instructor.

## URD 360. Conference Course in Urdu Language and Literature.

Supervised individual study of selected problems in Urdu language or literature. Conference course. May be repeated for credit. Prerequisite: Upper-division standing and written consent of instructor on form obtained from the undergraduate adviser.

## **Department of Classics**

No knowledge of Greek or Latin is required for courses in classical civilization or in ancient history and classical civilization. These courses may not be counted toward fulfillment of any foreign language requirement.

Unless otherwise indicated, all Greek courses are ancient Greek (including New Testament Greek). Students beginning ancient Greek normally follow the regular sequence: Greek 506, 507, 311, and 312K. An intensive sequence is also available: Greek 804 and 412, normally followed by 311.

Students beginning Latin normally follow the regular sequence: Latin 506, 507, 311, and 312K or 316. Students may instead follow an accelerated sequence; information about this sequence is available from the undergraduate departmental adviser. Students with high school or transfer credit in Latin usually begin University coursework at a higher level. To ensure proper placement, students should consult the undergraduate adviser for the Department of Classics before registering.

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

# Ancient History and Classical Civilization: AHC

### **Lower-Division Courses**

#### AHC 310. Introductory Surveys in Premodern History.

Introductory survey of premodern history with emphasis on regions outside of the ancient Mediterranean world. Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

**Topic 1: Introduction to the History and Culture of Spain.** Same as European Studies 306 (Topic 2) and History 306N (Topic 13). The history of Spain from its beginnings in the stone age through the great social and economic upheavals of the twentieth century. Three lecture hours a week for one semester. Only one of the following may be counted: Ancient History and Classical Civilization 310 (Topic: Introduction to the History and Culture of Spain), 310 (Topic 1), European Studies 306 (Topic: Introduction to the History and Culture of Spain), 306 (Topic 2), History 306N (Topic: Introduction to the History and Culture of Spain), 306N (Topic 13).

#### AHC 319. Introductory Surveys in Roman and Greek History.

Three lecture hours or two lecture hours and one discussion hour a week for one semester. May be repeated for credit when the topics vary.

**Topic 1: The Ancient Mediterranean World.** Same as Classical Civilization 319D and History 319D. Survey of the ancient Mediterranean from ca. 3000 BC to AD 476. Focus on the development of ideas and institutions in the Greek and Roman worlds and on the active cultural exchange among the diverse civilizations of the broader region that shaped Greek and Roman history and cultural identity.

#### AHC 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Ancient History.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the ancient history and classical civilization program. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

## **Upper-Division Courses**

#### AHC 325. Topics in Ancient History.

Topics in the history of the Greek and Roman empires and the surrounding area. Three lecture hours or two lecture hours and one discussion hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 1: The History of Rome: The Republic.** Same as History 321M. A survey of Roman history from the founding of Rome to the death of Julius Caesar. The equivalent of three lecture hours a week for one semester. Ancient History and Classical Civilization 325 (Topic 1) and History 321M may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 2: The History of Rome: The Empire.** Same as History 321. A survey of the Roman world from Augustus to Constantine the Great. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Ancient History and Classical Civilization 325 (Topic 2), Core Texts and Ideas 375 (Topic: History of Rome: The Empire), European Studies

346 (Topic: History of Rome: The Empire), History 321. Additional prerequisite: Upper-division standing.

**Topic 3: Rome and Jerusalem.** Same as History 321G, Jewish Studies 365 (Topic 7), Middle Eastern Studies 342 (Topic 21), and Religious Studies 365 (Topic 1). A study of daily life in Israel during the Roman period, focusing on Jerusalem, ancient Palestinian synagogues and churches, Jewish and Christian symbolism, agriculture, warfare, and burial practices. Three lecture hours a week for one semester. Only one of the following may be counted: Ancient History and Classical Civilization 325 (Topic 3), Classical Civilization 348 (Topic: Rome and Jerusalem), History 321G, Jewish Studies 365 (Topic 7), Middle Eastern Studies 342 (Topic 21), Religious Studies 365 (Topic 1), Urban Studies 353 (Topic: Rome and Jerusalem). Additional prerequisite: Upper-division standing.

Topic 6: Alexander the Great and the Hellenistic World. Same as History 351D. History of Asia, Egypt, and the Mediterranean world from Alexander's expedition to Asia to Rome's defeat of the last of the Hellenistic monarchs at Actium (ca. 334 to 31 BC). Two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Ancient History and Classical Civilization 325 (Topic 5), 325 (Topic 6), Classical Civilizations 351D, 354D, History 351D, 354D. Additional prerequisite: Upper-division standing. Topic 7: Archaic and Classical Greece. Same as Core Texts and Ideas 375 (Topic 7) and History 354E. Survey of Greek history from the emergence of the city-states to the rise of Macedonia. Two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Ancient History and Classical Civilization 325 (Topic 4), 325 (Topic 7), Classical Civilizations 354C, Core Texts and Ideas 375 (Topic: Archaic and Classical Greece), 375 (Topic 7), History 354C, 354E. Additional prerequisite: Upper-division standing.

**Topic 8: Archaeology of Greek Prehistory.** Same as Classical Civilization 340 (Topic 8), Middle Eastern Languages and Cultures 321 (Topic 33), and Middle Eastern Studies 342 (Topic 42). Explores the development of complex societies in ancient Greece by studying its prehistory through archaeology. Only one of the following may be counted: Ancient History and Classical Civilization 325 (Topic: Archaeology of Greek Prehistory), 325 (Topic 8), Classical Civilization 340 (Topic: Archaeology of Greek Prehistory), 340 (Topic 8), Middle Eastern Languages and Cultures 321 (Topic: Archaeology of Greek Prehistory), 321 (Topic 33), Middle Eastern Studies 320 (Topic: Archaeology of Greek Prehistory), 342 (Topic: Archaeology of Greek Prehistory), 342 (Topic 42), Persian 372 (Topic: Archaeology of Greek Prehistory).

**Topic 13: The Ancient Historians.** Same as Classical Civilization 322 (Topic 13). Examines the main works of ancient historiography, and provides grounding in the central issues with which these works engage. Only one of the following may be counted: Ancient History and Classical Civilization 325 (Topic: Ancient Historians), 325 (Topic 13), Classical Civilization 322 (Topic: Ancient Historians), 322 (Topic 13).

**Topic 15: Civil War in Rome.** Same as Classical Civilization 348 (Topic 15). Examines the sequence of civil conflict in Rome from the struggle of the orders through the rise of Constantine the Great. Only one of the following may be counted: Ancient History and Classical Civilization 325 (Topic: Civil War in Rome), 325 (Topic 15), Classical Civilization 348 (Topic: Civil War in Rome), 348 (Topic 15), History 362G (Topic: Civil War in Rome).

#### AHC 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Ancient History.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the ancient history and classical civilization program. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### AHC 330. Topics in Premodern History.

Topics in premodern history with emphasis on regions outside of the ancient Mediterranean world. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

Topic 1: The Dead Sea Scrolls. Same as History 364G (Topic 3), Jewish Studies 364 (Topic 4), Middle Eastern Languages and Cultures 321 (Topic 17), Middle Eastern Studies 342 (Topic 23), and Religious Studies 353D. Three lecture hours a week for one semester. Only one of the following may be counted: Ancient History and Classical Civilization 330 (Topic: The Dead Sea Scrolls), 330 (Topic 1), History 364G (Topic 3), Jewish Studies 364 (Topic 4), Middle Eastern Languages and Cultures 321 (Topic 17), 342 (Topic 23), Religious Studies 353D. Additional prerequisite: Upper-division standing. Topic 2: Epics and Heroes of India. Same as Asian Studies 372 (Topic 40), Core Texts and Ideas 345 (Topic 11), and History 350L (Topic 54). Only one of the following may be counted: Ancient History and Classical Civilization 330 (Topic: Epics and Heroes of India), 330 (Topic 2), Asian Studies 372 (Topic: Epics and Heroes of India), 372 (Topic 40), Core Texts and Ideas 345 (Topic: Epics and Heroes of India), 345 (Topic 11), History 350L (Topic 54).

Topic 3: Mystics, Visionaries, and Heretics in Medieval Europe. Same as History 350L (Topic 74) and Religious Studies 375S (Topic 3). Examines particular mystical and visionary experiences within the context of medieval European Christianity. Only one of the following may be counted: Ancient History and Classical Civilization 330 (Topic: Mystics, Visionaries and Heretics in Medieval Europe), 330 (Topic 3), History 350L (Topic: Mystics, Visionaries and Heretics in Medieval Europe), 350L (Topic 74), Religious Studies 375S (Topic: Mystics, Visionaries and Heretics in Medieval Europe), 375S (Topic 3). Topic 4: Lost Languages and Decipherment. Same as Classical Civilization 348 (Topic 21), Middle Eastern Languages and Cultures 321 (Topic 37), and Middle Eastern Studies 342 (Topic 45). Only one of the following may be counted: Ancient History and Classical Civilization 330 (Topic: Lost Languages & Decipherment), 330 (Topic 4), Classical Civilization 348 (Topic: Lost Languages & Decipherment), 348 (Topic 21), Linguistics 350 (Topic: Lost Languages & Decipherment), Middle Eastern Languages and Cultures 321 (Topic: Lost Languages & Decipherment), 321 (Topic 37), Middle Eastern Studies 342 (Topic: Lost Languages & Decipherment), 342 (Topic 45). Prerequisite: Upper-division standing.

#### AHC 378. Undergraduate Seminar in Ancient History.

Restricted to students in the Department of Classics. Lectures, discussion, reading, and research on selected topics in Greek and Roman history. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 1: Roman Law.** Same as Classical Civilization 375 (Topic 1). Introduction to Roman law with close study of primary sources. Only one of the following may be counted: Ancient History and Classical Civilization 378 (Topic: Roman Law), 378 (Topic 1), Classical Civilization 375 (Topic 1).

**Topic 2: Aegean Prehistory.** Same as Classical Civilization 375 (Topic 2). Traces political, social, economic, and general cultural developments on Crete and the Greek mainland between roughly 2200 and 1100 BCE. Only one of the following may be counted: Ancient History and Classical Civilization 378 (Topic: Aegean Prehistory), 378 (Topic 2), Classical Civilization 375 (Topic 2), History 350L (Topic: Aegean Prehistory).

**Topic 3: Writing Ancient History Today.** Same as Classical Civilization 375 (Topic 3). Questions that engage ancient historians today and the methods that they use. Some background in ancient Greek history is recommended. Only one of the following may be counted: Ancient History and Classical Civilization 378 (Topic: Writing Ancient History Today), 378 (Topic 3), Classical Civilization 375 (Topic 3), History 350L (Topic: Writing Ancient History Today).

**Topic 4: The Athenian Empire.** Same as Classical Civilization 375 (Topic 4). Explores Athenian society, democracy, and empire from the development of Athenian hegemony in the 470s BCE through the break up of the Athenian Empire in 404 BCE. Only one of the following may be counted: Ancient History and Classical Civilization 378 (Topic: Athenian Empire), 378 (Topic 4), Classical Civilization 375 (Topic 4), History 350L (Topic: Athenian Empire).

#### AHC 679H. Honors Tutorial Course.

Supervised conference course for honors candidates in ancient history and classical civilization. Three conference hours a week for two semesters. Prerequisite: For 679HA, upper-division standing and admission to the Ancient History and Classical Civilization Honors Program; for 679HB, Ancient History and Classical Civilization 679HA.

## **Classical Civilization: C C**

### **Lower-Division Courses**

#### C C 301. Introduction to Ancient Greece.

Same as Core Texts and Ideas 301G. Greatness of Greece as reflected in Greek history, literature, philosophy, art, religion, and politics. No knowledge of Greek is required. Three lecture hours a week for one semester. Only one of the following may be counted: Classical Civilization 301, Core Texts and Ideas 310 (Topic: Introduction to Ancient Greece), 301G.

#### C C 302. Introduction to Ancient Rome.

Survey of the highlights and the influence of Roman civilization. No knowledge of Latin is required. Three class hours a week for one semester.

#### C C 303. Introduction to Classical Mythology.

Survey of major Greek and Roman myths and their influence on literature, art, and music. Three class hours a week for one semester. Classical Civilization 303 and 352 may not both be counted.

#### C C 304C. Topics in the Ancient World.

An introductory survey of the highlights of Greek and Roman civilization and early Christianity. No knowledge of Greek or Latin is required. Three lecture hours a week for one semester. Classical Civilization 304C and 348 may not both be counted unless the topics vary. May be repeated for credit when the topics vary.

#### Topic 1: Introduction to Greek Private Life.

Topic 2: Paganism to Christianity: An Introduction.

**Topic 3: Introduction to Ancient Egypt.** Same as African and African Diaspora Studies 317C (Topic 5). A survey of the language, culture, and history of Egypt from the prehistorical period (13,000 BC) to the New Kingdom (1069 BC). Only one of the following may be counted: African and African Diaspora Studies 317C (Topic: Introduction to Ancient Egypt), 317C (Topic 5), Classical Civilization 304C (Topic 3), 348 (Topic 11).

**Topic 4: Greece and Rome: Film and Reality.** Key events and personalities of ancient Greece and Rome and their treatment in major European and American films. Only one of the following may be counted: Classical Civilization 304C (Topic: Greece and Rome: Film and Reality), 304C (Topic 4), European Studies 307 (Topic: Greece and Rome: Film and Reality).

**Topic 6: Ancient Philosophy.** Same as Philosophy 301K. Primarily for lower-division students. An introduction to the philosophical achievements of the ancient world, concentrating on Plato and Aristotle. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Classical Civilization 304C (Topic: Ancient Philosophy), 304C (Topic 6), Philosophy 301K.

#### C C 305. Topics in Roman Civilization.

A survey of the social life and customs of ancient Rome and Pompeii. No knowledge of Latin is required. Three class hours a week for one semester. May be repeated for credit when the topics vary.

Topic 1: Introduction to Caesar and Augustus. Topic 2: Introduction to Roman Private Life.

## C C 306. Introduction to the Latin and Greek Element in English.

The systematic study of the Latin and Greek elements in the English vocabulary with a view to increasing the student's facility and authority in English. No knowledge of Greek or Latin is required. Three class hours a week for one semester.

## C C 306M. Introduction to Medical and Scientific Terminology.

A systematic study of medical and scientific terminology based on Greek and Latin roots. No knowledge of Greek or Latin is required. Three lecture hours a week for one semester. Classical Civilization 306M and 336M may not both be counted.

#### C C 307C. Introduction to Greek Archaeology.

A survey of the artifacts, monuments, and sites of ancient Greece, and their value for documenting Greek religious, social, and cultural history. No knowledge of Greek is required. Three lecture hours a week for one semester.

#### C C 307D. Introduction to Roman Archaeology.

A survey of the artifacts, monuments, and sites of ancient Rome, and their value for documenting Roman religious, social, and cultural history. No knowledge of Latin is required. Three lecture hours a week for one semester.

#### C C 307K. Topics in Archaeology.

Survey of archaeological discoveries about ancient Greece or Rome in their historical and cultural context; emphasis on the major sites and monuments of architecture and art. No knowledge of Greek or Latin is required. Three class hours a week for one semester. Classical Civilization 307K and 340 may not both be counted unless the topics vary. May be repeated for credit when the topics vary.

#### C C 317. Classical Archaeology: Methods and Approaches.

An overview of the history of classical archaeology and its methods and approaches. Focuses on case studies of major sites and their excavation and interpretation. No knowledge of Greek or Latin is required. Three lecture hours a week for one semester. Prerequisite: One of the following courses: Ancient History and Classical Civilization 319 (Topic 1: The Ancient Mediterranean World), Art History 302, Classical Civilization 301, 302, 307C, 307D, 318, 319D, History 319D, Religious Studies 318.

#### C C 318. The Rise of Christianity.

Same as Religious Studies 318. Introduction to the origins and development of Christianity. Three lecture hours a week for one semester.

#### C C 319D. The Ancient Mediterranean World.

Same as Ancient History and Classical Civilization 319 (Topic 1: The Ancient Mediterranean World) and History 319D. Survey of the ancient Mediterranean from ca. 3000 BC to AD 476. Focus on the development of ideas and institutions in the Greek and Roman worlds and on the active cultural exchange among the diverse civilizations of the broader region that shaped Greek and Roman history and cultural identity. Three lecture hours or two lecture hours and one discussion hour a week for one semester.

#### C C 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Classical Civilization.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Classics. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### C C 322. Classical Literature in Translation.

Survey of Greek and Latin philosophical, literary, and historical classics, in translation. No knowledge of Greek or Latin is required. Three class hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

#### Topic 3: Wit and Humor in Antiquity.

**Topic 4: Ancient Epic.** Same as Core Texts and Ideas 345 (Topic 9). Only one of the following may be counted: Classical Civilization 322 (Topic 4), 322 (Topic: Epic Tradition: From Homer to Tennyson), Core Texts and Ideas 345 (Topic: Ancient Epic), 345 (Topic 9). **Topic 13: The Ancient Historians.** Same as Ancient History and Classical Civilization 325 (Topic 13). Examines the main works of ancient historiography, and provides grounding in the central issues with which these works engage. Only one of the following may be counted: Ancient History and Classical Civilization 325 (Topic: Ancient Historians), 325 (Topic 13), Classical Civilization 322 (Topic: Ancient Historians), 322 (Topic 13).

#### C C 327. Parageography.

Survey of the classical and medieval roots of speculative literature, especially those fantasies that involve the creation and presentation of imaginary places, lands, and worlds. No knowledge of Greek or Latin is required. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### C C 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Classical Civilization.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Classics. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### C C 336M. Medical and Scientific Terminology.

A systematic study of medical and scientific terminology based on Greek and Latin roots. No knowledge of Greek or Latin is required. Three lecture hours a week for one semester. Classical Civilization 306M and 336M may not both be counted. Prerequisite: Upper-division standing.

#### C C 340. Advanced Topics in Classical Archaeology.

Detailed study of topics such as architecture, sculpture, or topography of sites. No knowledge of Greek or Latin is required. Three lecture hours a week for one semester. Classical Civilization 307K and 340 may not both be counted unless the topics vary. Classical Civilization 340 and 375 may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 1: Greek Archaeology.** Study of the artifacts, monuments, and sites of classical Greece; and their value for documenting ancient Greek religious, social, and cultural history.

**Topic 2: Art and Politics in Imperial Rome.** Same as Art History 327N. Public art of the Roman Empire from Augustus to late antiquity, ca. 31 BC to AD 350. Three lecture hours a week for one semester. Art History 327N and Classical Civilization 340 (Topic 2) may not both be counted. Prerequisite: Upper-division standing.

Topic 3: Greek Architecture. The architecture of mainland Greece, Asia Minor, and Sicily from the Dark Ages to the end of the Hellenistic period (ca. 1000 to 30 BC), with emphasis on public buildings, both religious and secular. Prerequisite: For art history and visual art studies majors, Art History 302 and 303; for others, at least one of the following is advisable but not required: Art History 301, 302, 303. Topic 4: Roman Architecture. Prerequisite: For art history and visual art studies majors, Art History 302 and 303; for others, at least one of the following is advisable but not required: Art History 301, 302, 303. Topic 5: Hellenistic Art and Architecture. Art of the Hellenistic period from the reign of Alexander the Great to the beginning of the Roman Empire, ca. 336 to 31 BC. Prerequisite: For art history and visual art studies majors, Art History 302 and 303; for others, at least one of the following is advisable but not required: Art History 301, 302, 303.

Topic 6: Food, Health, and Culture in the Ancient Mediterranean.

Values and social practices in the ancient Mediterranean as expressed by foodways and nutritional choices. Classical Civilization 340 (Topic 6) and 348 (Topic: Food and Drink) may not both be counted. **Topic 7: Pompeii.** Uses ancient literary texts and various analytical approaches to examine the ancient remains of Pompeii and Herculaneum in context. Classical Civilization 340 (Topic: Pompeii) and 340 (Topic 7) may not both be counted.

**Topic 8:** Archaeology of Greek Prehistory. Same as Ancient History and Classical Civilization 325 (Topic 8), Middle Eastern Languages and Cultures 321 (Topic 33), and Middle Eastern Studies 342 (Topic 42). Explores the development of complex societies in ancient Greece by studying its prehistory through archaeology. Only one of the following may be counted: Ancient History and Classical Civilization 325 (Topic: Archaeology of Greek Prehistory), 325 (Topic 8), Classical Civilization 340 (Topic: Archaeology of Greek Prehistory), 340 (Topic 8), Middle Eastern Languages and Cultures 321 (Topic: Archaeology of Greek Prehistory), 321 (Topic 33), Middle Eastern Studies 320 (Topic: Archaeology of Greek Prehistory), 342 (Topic: Archaeology of Greek Prehistory), 342 (Topic 42), Persian 372 (Topic: Archaeology of Greek Prehistory).

**Topic 9: Topography and Monuments of Ancient Rome.** Examines the architecture and urban development of Rome from its beginnings until late antiquity. Only one of the following may be counted: Classical Civilization 340 (Topic: Topography and Monuments of Ancient Rome), 340 (Topic 9), European Studies 346 (Topic: Topography and Monuments of Ancient Rome).

Topic 10: Archaeology, Art, and Analysis of Greco-Roman and Aegean Pottery. Various approaches to pottery and analytical techniques. Combines lectures with hands-on analysis of sherds, as well as the experimental manufacture of pottery in bonfires. Only one of the following may be counted: Anthropology 324L (Topic: Archaeology, Art and Analysis of Greco-Roman and Aegean Pottery), Classical Civilization 340 (Topic: Archaeology, Art and Analysis of Greco-Roman and Aegean Pottery), 340 (Topic 10).

#### C C 348. Topics in Ancient Civilization.

The development and progress of ancient civilization, including history, philosophy, literature, and culture. No knowledge of Greek or Latin is required. Three lecture hours a week for one semester; additional hours may be required for some topics. Classical Civilization 304C and 348 may not both be counted unless the topics vary. Classical Civilization 348 and 375 may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 4: History of Ancient Philosophy.** Same as Philosophy 329K. Development of Western philosophy from the pre-Socratics to the early Christian era; emphasis on Plato and Aristotle. Three lecture hours and one discussion hour a week for one semester. Classical Civilization 348 (Topic 4) and Philosophy 329K may not both be counted. Additional prerequisite: Six semester hours of coursework in philosophy.

**Topic 5: Homosexuality in Antiquity.** Prerequisite: Upper-division standing.

Topic 7: Women in Classical Antiquity. Same as Women's and Gender Studies 345 (Topic 9: Women in Classical Antiquity).

**Topic 9: The German Language: Historical Perspectives.** Only one of the following may be counted: Anthropology 320L (Topic 8: German and English: Historical Perspectives), 320L (Topic 9), Classical Civilization 348 (Topic 8: German and English: Historical Perspectives), 348 (Topic 9), German 369 (Topic 4), Germanic Civilization 327E (Topic 9: German and English: Historical Perspectives), Linguistics 373 (Topic 8: German and English: Historical Perspectives), 373 (Topic 9). Additional prerequisite: Six semester hours of upper-division coursework in German, or fourteen hours of coursework in German and six hours of coursework in linguistics.

**Topic 10: Jesus in History and Tradition.** Same as Religious Studies 335. Critical issues, scholarly debates, and historical methods in studying the development of the Christian tradition regarding the figure of Jesus. Prerequisite: Upper-division standing.

**Topic 11: Ancient Egypt.** Discussion of Egypt's culture, language, and history from the prehistorical period (13,000 BC) to the New Kingdom (1069 BC). Only one of the following may be counted: African and African Diaspora Studies 317C (Topic: Introduction to Ancient Egypt), 317C (Topic 5), Classical Civilization 304C (Topic 3), 348 (Topic 11). Additional prerequisite: Upper-division standing.

**Topic 13: Gender and Sexuality in Ancient Novel.** Same as Women's and Gender Studies 345 (Topic 53). The major works of prose fiction from Greco-Roman antiquity and how those works relate to the intellectual, cultural, and social currents of late antiquity. Only one of the following may be counted: Classical Civilization 348 (Topic: Gender and Sexuality in Ancient Novel), 348 (Topic 13), Women's and Gender Studies 345 (Topic: Gender and Sexuality in Ancient Novel), 345 (Topic 53).

**Topic 14: Ancient Greek Medicine.** Examines ancient Greek medicine in light of the modern fields of pathology, surgery, pharmacology, therapy, obstetrics, psychology, anatomy, medical science, ethics, and education. Classical Civilization 348 (Topic: Ancient Greek Medicine) and 348 (Topic 14) may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 15: Civil War in Rome.** Same as Ancient History and Classical Civilization 325 (Topic 15). Examines the sequence of civil conflict in Rome from the struggle of the orders through the rise of Constantine the Great. Only one of the following may be counted: Ancient History and Classical Civilization 325 (Topic: Civil War in Rome), 325 (Topic 15), Classical Civilization 348 (Topic: Civil War in Rome), 348 (Topic 15), History 362G (Topic: Civil War in Rome).

**Topic 16: Moral Agency In Greek Tragedy.** Same as Core Texts and Ideas 345 (Topic 3). Subjects include the masterpieces of Greek tragedy, the social and cultural background of the texts, and questions posed by the texts. Only one of the following may be counted: Classical Civilization 348 (Topic: Moral Agency In Greek Tragedy), 348 (Topic 16), Core Texts and Ideas 345 (Topic: Moral Agency In Greek Tragedy), 345 (Topic 3).

**Topic 17: Egyptian Hieroglyphics in Cultural Context.** Same as African and African Diaspora Studies 374C (Topic 5). The vocabulary and grammar of ancient Egypt as a guide to understanding artifacts and monuments from the different periods of Egyptian history, whether in museums, exhibitions, or on site overseas. Only one of the following may be counted: African and African Diaspora Studies 374C (Topic: Egyptian Hieroglyphics in Cultural Context), 374C (Topic 5), Classical Civilization 348 (Topic: Egyptian Hieroglyphics in Cultural Context), 348 (Topic 17).

**Topic 18: Ancient Mediterranean Masculinities.** Same as Women's and Gender Studies 340 (Topic 59). Examines in-depth literary and artistic evidence from multiple ancient cultures to determine how each society defined the distinctively "masculine" role it expected of men and boys and how each society transformed boys into men. Only one of the following may be counted: Classical Civilization 348 (Topic: Ancient Mediterranean Masculinities), 348 (Topic 18), Women's and Gender Studies 340 (Topic: Ancient Mediterranean Masculinities), 340 (Topic 59).

**Topic 19: Nero**. Nero's life in its larger social and historical context, as well as his reception in the medieval period and beyond. Only one of the following may be counted: Classical Civilization 348 (Topic: Nero), 348 (Topic 19), European Studies 346 (Topic: Nero).

**Topic 20: Roman Philosophy and Science.** Examines the aims, methods, and achievements of philosophy and science in the ancient Roman world.

**Topic 21: Lost Languages and Decipherment.** Same as Ancient History and Classical Civilization 330 (Topic 4), Middle Eastern Languages and Cultures 321 (Topic 37), and Middle Eastern Studies 342 (Topic 45). Only one of the following may be counted: Ancient History and Classical Civilization 330 (Topic: Lost Languages & Decipherment), 330 (Topic 4), Classical Civilization 348 (Topic: Lost Languages & Decipherment), 348 (Topic 21), Linguistics 350 (Topic: Lost Languages & Decipherment), Middle Eastern Languages and Cultures 321 (Topic: Lost Languages & Decipherment), 321 (Topic 37), Middle Eastern Studies 342 (Topic: Lost Languages & Decipherment), 342 (Topic 45). Prerequisite: Upper-division standing.

**Topic 23: Values and Leadership in Ancient World.** Same as Core Texts and Ideas 375 (Topic 8). Only one of the following may be counted: Classical Civilization 348 (Topic: Values and Leadership in Ancient World), 348 (Topic 23), Core Texts and Ideas 375 (Topic: Values and Leadership in Ancient World), 375 (Topic 8), History 350L (Topic: Values and Leadership in Ancient World). Additional prerequisite: Upper-division standing.

#### C C 352. Classical Mythology.

Survey of major Greek and Roman myths and their influence on literature, art, and music. Three lecture hours a week for one semester. Classical Civilization 303 and 352 may not both be counted. Prerequisite: Upperdivision standing.

#### C C 362. Conference Course in Classical Archaeology.

Advanced archaeological instruction and research in classical archaeology. No knowledge of Greek is required. Conference course. May be repeated for credit. Prerequisite: Upper-division standing and consent of instructor.

#### C C 363. Conference Course in Classical Civilization.

Supervised work in various specialized aspects of classical civilization. No knowledge of Greek or Latin is required. Conference course. May be repeated for credit. Prerequisite: Upper-division standing and consent of instructor.

#### C C 375. Seminar in Classical Studies.

Restricted to students in the Department of Classics. Study of selected topics in classical studies. Some knowledge of Greek or Latin is expected. Three lecture hours a week for one semester. Classical Civilization 340 and 375 may not both be counted unless the topics vary. Classical Civilization 348 and 375 may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 1: Roman Law.** Same as Ancient History and Classical Civilization 378 (Topic 1). Introduction to Roman law with close study of primary sources. Only one of the following may be counted: Ancient History and Classical Civilization 378 (Topic: Roman Law), 378 (Topic 1), Classical Civilization 375 (Topic 1).

**Topic 2: Aegean Prehistory.** Same as Ancient History and Classical Civilization 378 (Topic 2). Traces political, social, economic, and general cultural developments on Crete and the Greek mainland between roughly 2200 and 1100 BCE. Only one of the following may be counted: Ancient History and Classical Civilization 378 (Topic: Aegean Prehistory), 378 (Topic 2), Classical Civilization 375 (Topic 2), History 350L (Topic: Aegean Prehistory).

**Topic 3: Writing Ancient History Today.** Same as Ancient History and Classical Civilization 378 (Topic 3). Questions that engage ancient historians today and the methods that they use. Some background in ancient Greek history is recommended. Only one of the following may be counted: Ancient History and Classical Civilization 378 (Topic: Writing Ancient History Today), 378 (Topic 3), Classical Civilization 375 (Topic 3), History 350L (Topic: Writing Ancient History Today). **Topic 4: The Athenian Empire.** Same as Ancient History and Classical Civilization 378 (Topic 4). Explores Athenian society, democracy, and empire from the development of Athenian hegemony in the 470s BCE through the break up of the Athenian Empire in 404 BCE. Only one of the following may be counted: Ancient History and Classical Civilization 378 (Topic: Athenian Empire), 378 (Topic 4), Classical Civilization 375 (Topic 4), History 350L (Topic: Athenian Empire).

#### C C 679H. Honors Tutorial Course.

Supervised conference course for honors candidates in classics. Three conference hours a week for two semesters. Prerequisite: For 679HA, upper-division standing and admission to the Classics Honors Program; for 679HB, Classical Civilization 679HA.

## Greek: GK

### **Lower-Division Courses**

#### GK 601C. Beginning Greek.

Studies the fundamentals of grammar and reading in ancient Greek. Six lecture hours a week for one semester. Only one of the following may be counted: Greek 601C; 804; 506 and 507.

#### GK 502. First-Year Modern Greek I.

Introduction to grammar and reading. Five lecture hours a week for one semester. Greek 502 and 602C may not both be counted.

#### GK 602C. Beginning Modern Greek.

Six lecture hours a week for one semester. Greek 502 and 602C may not both be counted. Greek 602C and 503 may not both be counted.

#### GK 503. First-Year Modern Greek II.

Continuation of Greek 502. Five lecture hours a week for one semester. Greek 602C and 503 may not both be counted. Prerequisite: Greek 502 with a grade of at least C.

#### GK 804. Intensive Beginning Greek.

An accelerated course for highly motivated students that combines the material covered in Greek 506 with that covered in the first part of Greek 507. Offered in the summer session as part of the Intensive Greek Program. The Intensive Greek Program meets for five hours each weekday during the summer session. Only one of the following may be counted: Greek 601C; 804; 506 and 507. The student must complete both Greek 804 and 412 in order to earn credit for either; the same grade will be awarded for both courses. Prerequisite: Concurrent enrollment in Greek 412. Students who enroll in 804 must take Greek 412 in the same summer session.

#### GK 506 (TCCN: GREE 1511). First-Year Greek I.

Studies the fundamentals of grammar and reading in ancient Greek. Five lecture hours a week for one semester. Only one of the following may be counted: Greek 601C; 804; 506 and 507.

#### GK 507 (TCCN: GREE 1512). First-Year Greek II.

Continuation of Greek 506. Five lecture hours a week for one semester. Only one of the following may be counted: Greek 601C; 804; 506 and 507. Greek 507 and 412 may not both be counted. Prerequisite: Greek 506 with a grade of at least C.

#### GK 309K. Conference Course.

Supervised individual instruction in second-year ancient or modern Greek reading. Conference course. May be repeated for credit. Prerequisite: Consent of instructor.

#### GK 310. Second-Year Modern Greek I.

Culture, language, and literature of present-day Greece. Three lecture hours a week for one semester. Greek 310 and 610C may not both be counted. Prerequisite: Greek 602C or 503 with a grade of at least C.

#### GK 610C. Intermediate Modern Greek.

Continuation of Greek 602C. Six lecture hours a week for one semester. Greek 310 and 610C may not both be counted. Greek 610C and 310K may not both be counted. Prerequisite: Greek 602C or 503 with a grade of at least C.

#### GK 310K. Second-Year Modern Greek II.

Continuation of Greek 310. Three lecture hours a week for one semester. Greek 610C and 310K may not both be counted. Prerequisite: Greek 310 with a grade of at least C.

#### GK 311 (TCCN: GREE 2311). Intermediate Greek I.

Continuation of Greek 601C or 507. Introductory readings from classical authors such as Lysias, Plato, and Xenophon. Includes grammar review. Three lecture hours a week for one semester. Prerequisite: Greek 601C or 507 with a grade of at least C, or Greek 804 and 412 with a grade of at least C in each.

#### GK 412. Intensive Greek.

An accelerated course for highly motivated students. Completion of this course is equivalent to completion of Greek 506 and 507. Students who enroll in 412 must take Greek 804 in the same summer session. A grade of A may allow the student to advance to Greek 324 with consent of the Greek 324 instructor. The Intensive Greek Program meets for five hours each weekday during the summer session. Greek 507 and 412 may not both be counted. Prerequisite: Concurrent enrollment in Greek 804.

#### GK 312K. Intermediate Greek II.

Continuation of Greek 311. Selected readings from classical and biblical authors. Three lecture hours a week for one semester. Greek 312K and 312L may not both be counted. Prerequisite: Greek 311 with a grade of at least C.

#### GK 312L. Intermediate Greek II: Biblical Greek.

Continuation of Greek 311. A parallel to Greek 312K with a focus on biblical Greek. Three class hours a week for one semester. Greek 312K and 312L may not both be counted. Prerequisite: Greek 311 with a grade of at least C.

#### GK 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Greek.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Classics. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### GK 324. Advanced Greek.

Reading and analysis of classical authors such as Homer, Herodotus, Euripides, and Plato. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Greek 312K or 312L with a grade of at least C; or Greek 412 with a grade of at least A-, and consent of the undergraduate adviser.

Topic 1: Euripides. Topic 2: Herodotus. Topic 3: Homer's Iliad. Topic 4: Plato. Topic 5: Sophocles. Greek 324 (Topic: Junior Reading: Sophocles) and

324 (Topic 5) may not both be counted. **Topic 6: Life of Themistocles.** Greek 324 (Topic: Life of Themistocles) and 324 (Topic 6) may not both be counted.

**Topic 7: Apollonius.** Greek 324 (Topic: Apollonius) and 324 (Topic 7) may not both be counted.

**Topic 8: Greek Love Poetry.** Greek 324 (Topic: Greek Love Poetry) and 324 (Topic 8) may not both be counted.

**Topic 9: Xenophon**. Greek 324 (Topic: Xenophon) and 324 (Topic 9) may not both be counted.

#### GK 326. Advanced Greek Grammar and Composition.

Study of syntax, style, and principles of written composition. Three lecture hours a week for one semester. Prerequisite: Credit or registration for Greek 324.

#### GK 328. Advanced Biblical Greek.

Reading and analysis of selections from the New Testament, the Septuagint, and related writings. Three lecture hours a week for one semester. Greek 328 and 362 may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Greek 312K or 312L with a grade of at least C; or Greek 412 with a grade of at least A-, and consent of the undergraduate adviser.

Topic 1: Pauline Epistles.

Topic 2: The Gospel of John.

**Topic 3: Biblical Greek: Acts.** Greek 328 (Topic: Biblical Greek: Acts) and 328 (Topic 3) may not both be counted.

#### GK 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Greek.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Classics. University credit is awarded for work in an exchange program; it may be counted as coursework taken residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### GK 365. Seminar in Greek.

Critical study of authors such as Thucydides, Demosthenes, and Aeschylus. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Greek 324 or 328.

Topic 1: Aeschylus.

- Topic 2: Sophocles.
- Topic 3: Thucydides.
- Topic 4: Aristophanes.

Topic 5: Plato and Greek Prose. Greek 365 (Topic: Plato and Greek Prose) and 365 (Topic 5) may not both be counted.

**Topic 6: Female Poets of Ancient Greece.** Greek 365 (Topic: Female Poets of Ancient Greece) and 365 (Topic 6) may not both be counted. **Topic 7: Callimachus.** Greek 365 (Topic: Callimachus) and 365 (Topic 7) may not both be counted.

**Topic 8: Aristotle.** Greek 365 (Topic: Aristotle On Tragedy) and 365 (Topic 8) may not both be counted.

#### GK 370. Advanced Conference Course.

Supervised reading. Conference course. May be repeated for credit. Prerequisite: Greek 310K or 324, and consent of instructor.

#### GK 679H. Honors Tutorial Course.

Supervised conference course for honors candidates in Greek. Three conference hours a week for two semesters. Prerequisite: For 679HA, upper-division standing and admission to the honors program in Greek; for 679HB, Greek 679HA.

## Latin: LAT

### **Lower-Division Courses**

#### LAT 601C. Beginning Latin.

Fundamentals of grammar and reading. Six lecture hours a week for one semester. Only one of the following may be counted: Latin 601C; 506 and 507

#### LAT 506 (TCCN: LATI 1511). First-Year Latin I.

Fundamentals of grammar and reading. Five lecture hours a week for one semester. Only one of the following may be counted: Latin 601C; or 506 and 507.

#### LAT 507 (TCCN: LATI 1512). First-Year Latin II.

Continuation of Latin 506. Five lecture hours a week for one semester. Only one of the following may be counted: Latin 601C; or 506 and 507 Prerequisite: Latin 506 with a grade of at least C.

#### LAT 309K. Conference Course.

Supervised individual instruction in second-year Latin reading. Conference course. May be repeated for credit. Prerequisite: Consent of instructor.

#### LAT 311 (TCCN: LATI 2311). Intermediate Latin I.

Continuation of Latin 601C and 507. Introduction to reading classical authors in their cultural context. Includes grammar review. Three lecture

hours a week for one semester. Latin 311 and 511K may not both be counted. Prerequisite: Latin 601C or 507 with a grade of at least C.

#### LAT 511K. Accelerated Intermediate Latin.

Designed primarily for students of high academic ability and motivation. Comparable to Latin 311 and 312K together. Five lecture hours a week for one semester. Only one of the following may be counted: Latin 511K, 312K, 316. Latin 311 and 511K may not both be counted. Prerequisite: Latin 601C or 507 with a grade of at least A-.

#### LAT 312K. Intermediate Latin II.

Continuation of Latin 311. Selected readings from classical authors. Three lecture hours a week for one semester. Only one of the following may be counted: Latin 511K, 312K, 316. Prerequisite: Latin 311 with a grade of at least C.

#### LAT 316. Intermediate Latin II: Poetry.

Continuation of Latin 311. Selected readings from classical and medieval poets. Three lecture hours a week for one semester. Only one of the following may be counted: Latin 511K, 312K, 316. Prerequisite: Latin 311 with a grade of at least C.

#### LAT 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Latin.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Classics. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### LAT 322. Advanced Latin I.

Reading and analysis of selected classical authors. Three lecture hours a week for one semester. Prerequisite: Latin 511K, 312K, or 316 with a grade of at least C.

#### LAT 323. Advanced Latin II.

Reading and interpretation of prose and poetry texts at an early advanced level. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Latin 322 with a grade of at least C.

**Topic 5: Cicero and Catullus.** Latin 323 (Topic: Cicero and Catullus) and 323 (Topic 5) may not both be counted.

Topic 6: Elegy. Latin 323 (Topic: Elegy) and 323 (Topic 6) may not both be counted.

**Topic 7: Images of Augustus.** Latin 323 (Topic: Images of Augustus) and 323 (Topic 7) may not both be counted.

**Topic 8: Christian Martyrs in the Roman Empire.** Latin 323 (Topic: Christian Martyrs in the Roman Empire) and 323 (Topic 8) may not both be counted.

**Topic 9: Horace, Odes, and Satire.** Latin 323 (Topic: Horace's Odes) and 323 (Topic 9) may not both be counted.

#### LAT 324. Advanced Latin Grammar and Composition.

Study of syntax, style, and principles of written composition. Three lecture hours a week for one semester. Required of all Latin majors and students seeking a secondary school teaching certificate with Latin as a teaching field. Prerequisite: Latin 322 with a grade of at least C.

#### LAT 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Latin.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Classics. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### LAT 365. Seminar in Latin.

Critical study of authors such as Horace, Livy, Lucretius, and Tacitus. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Latin 323 with a grade of at least C.

Topic 1: Horace.

Topic 2: Lucretius.

Topic 4: Tacitus.

**Topic 8: Plautus and Early Latin.** Latin 365 (Topic: Plautus and Early Latin) and 365 (Topic 8) may not both be counted.

**Topic 9: Nero.** Introduction to our most important extant sources in Latin for Nero's life and reign: the biographer Suetonius, the historian Tacitus, and the philosopher Seneca. Latin 365 (Topic: Nero) and 365 (Topic 9) may not both be counted.

Topic 10: Seneca. Latin 365 (Topic: Seneca) and 365 (Topic 10) may not both be counted.

Topic 11: Intertextuality. Discusses the development, problems, and limitations of intertextuality in Roman Literature through a core group of texts, modern and ancient, which define our approach to and practice of intertextual reading. Latin 365 (Topic: Seminar: Intertextuality) and 365 (Topic 11) may not both be counted. Topic 12: Epyllion and Epos. The development of Latin epic from Catullus to Lucan. Latin 365 (Topic: Epyllion and Epos) and 365 (Topic 12) may not both be counted.

#### LAT 370. Advanced Conference Course.

Supervised reading. Conference course. May be repeated for credit. Prerequisite: Consent of instructor.

#### LAT 679H. Honors Tutorial Course.

Supervised conference course for honors candidates in Latin. Three conference hours a week for two semesters. Prerequisite: For 679HA, upper-division standing and admission to the Latin Honors Program; for 679HB, Latin 679HA.

## **Cognitive Science**

## **Cognitive Science: CGS**

### **Lower-Division Courses**

#### **Upper-Division Courses**

#### CGS 360. Cognitive Science: The Study of Mind.

An introduction to the study of mind known as cognitive science, focusing on key areas such as vision and language, cognition and problem solving, artificial intelligence. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 1: Introduction to Cognitive Science.** Same as Linguistics 373 (Topic 7: Introduction to Cognitive Science) and Philosophy 365 (Topic 2: Introduction to Cognitive Science).

## **Comparative Literature**

## Comparative Literature: C L

### **Lower-Division Courses**

#### C L 301. Introduction to Comparative Literature.

Reading and interpretation of literary texts in translation drawn from cultures around the world, focusing on methods of criticism and analysis. Three lecture hours a week for one semester.

#### C L 305. Topics in Comparative Literature.

Study of masterpieces of world literature; of different literary genres; and the relationship between literature and other disciplines such as psychology, philosophy, and film. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 1: Forbidden Romance in Modern Chinese Literature. Same as Asian Studies 301M (Topic 13). Introduction to modern Chinese literature from the late Qing Dynasty (latter half of the nineteenth century) to the present. Only one of the following may be counted: Asian Studies 301M (Topic: Forbidden Romance in Modern Chinese Literature), 301M (Topic 13), Comparative Literature 305 (Topic: Forbidden Romance in Modern Chinese Literature), 305 (Topic 1). Topic 2: The Vampire in Slavic Cultures. Same as European Studies 307 (Topic 1) and Russian, East European, and Eurasian Studies 302 (Topic 1). Examines the vampire in the cultures of Russia and Eastern Europe, including manifestations in literature, religion, art, film, and common practices from its origins to present. Only one of the following may be counted: Comparative Literature 305 (Topic: The Vampire in Slavic Cultures), 305 (Topic 2), European Studies 307 (Topic: The Vampire in Slavic Cultures), 307 (Topic 1), Russian, East European, and Eurasian Studies 302 (Topic: The Vampire in Slavic Cultures), 302 (Topic 1), Slavic 301 (Topic: The Vampire in Slavic Cultures), 301 (Topic 1).

**Topic 3: Movies Go To War.** Same as American Studies 315C, European Studies 307 (Topic 4), and German, Scandinavian, and Dutch Studies 311C. A comparison of films from various nations about major twentieth century wars to the historical facts of the conflicts as practicums in critical comparative analysis of histories as representations. Only one of the following may be counted: American Studies 315 (Topic: Movies Go to War, World War I to Vietnam), 315C, Comparative Literature 305 (Topic: Movies Go to War, World War I to Vietnam), 305 (Topic 3), European Studies 307 (Topic: Movies Go to War, World War I to Vietnam), 307 (Topic 4), German, Scandinavian, and Dutch Studies 311C, Germanic Civilization 311 (Topic 2: Movies Go to War, World War I to Vietnam).

**Topic 4: Grimms' Fairy Tales.** Same as European Studies 307 (Topic 5) and German, Scandinavian, and Dutch Studies 311E. Reading and discussion of tales from the Grimms' collection, as well as some of the relevant secondary literature. Three lecture hours a week for one semester. Only one of the following may be counted: Comparative Literature 305 (Topic: Grimms' Fairy Tales), 305 (Topic 4), European Studies 307 (Topic: Grimms' Fairy Tales), 307 (Topic 5), German, Scandinavian, and Dutch Studies 310 (Topic: Grimms' Fairy Tales), 311E, Germanic Civilization 301 (Topic: Grimms' Fairy Tales).

#### C L 315. Masterworks of World Literature.

Introduction to masterpieces of the world's literary traditions, emphasizing historical, generic, and thematic connections. Three lecture hours a week for one semester. Some sections require an additional discussion hour a week. Only one of the following may be counted: Comparative Literature 315, English 303D, (603B), 316N, Tutorial Course 303D, (603B). Prerequisite: One of the following: English 303C (or 603A), Rhetoric and Writing 306, 306Q, or Tutorial Course 303C (or 603A).

#### C L 318Q. Supervised Research.

Individual instruction.

### **Upper-Division Courses**

#### C L 320. Conference Course in Comparative Literature.

Independent study of literary projects under supervision of professors in comparative literature. Conference course. Prerequisite: Six semester hours of upper-division coursework in literature, of which three hours must be in a classical or foreign language.

#### C L 323. Topics in Comparative Literature.

Study of masterpieces of world literature; of different literary genres; of the relationship between literature and other disciplines, such as psychology, philosophy, and film; and of special topics of a comparative nature. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 3: Autobiography: A Modern Literary Species.** Same as Middle Eastern Studies 342 (Topic 20). Only one of the following may be counted: African and African Diaspora Studies 374 (Topic 25), Comparative Literature 323 (Topic 3), Middle Eastern Studies 342 (Topic 20), Women's and Gender Studies 340 (Topic: Autobiography: A Modern Literary Species). Additional prerequisite: Upper-division standing.

**Topic 4: Self-Revelation in Women's Writing.** Same as African and African Diaspora Studies 372E (Topic 8), Middle Eastern Studies 342 (Topic 19), and Women's and Gender Studies 340 (Topic 14). Only one of the following may be counted: African and African Diaspora Studies 372E (Topic 8), 374 (Topic 26), Comparative Literature 323 (Topic 4), English 322 (Topic: Self-Revelation in Women's Writing), Middle Eastern Studies 342 (Topic 19), Women's and Gender Studies 340 (Topic 14).

**Topic 6: Caribbean Literature**. Same as African and African Diaspora Studies 374F (Topic 7) and English 360L (Topic 2). Only one of the following may be counted: African and African Diaspora Studies 374F (Topic 7), Comparative Literature 323 (Topic 6), English 360L (Topic 2). Additional prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

Topic 8: Bulgakov's Master and Margarita. Same as Russian, East European, and Eurasian Studies 325 (Topic 29). Explores the novel in the context of other literary works by Bulgakov and its varied sources in world literature, music, and the visual arts. Only one of the following may be counted: Comparative Literature 323 (Topic: Bulgakov's Master and Margarita), 323 (Topic 8), Russian 360 (Topic: Bulgakov's Master and Margarita), 360 (Topic 3), Russian, East European, and Eurasian Studies 325 (Topic: Bulgakov's Master and Margarita), 325 (Topic 29). Additional prerequisite: Upper-division standing. Topic 10: Contemporary Scandinavian Stories. Same as European Studies 347 (Topic 16) and German, Scandinavian, and Dutch Studies 341 J. An analysis of contemporary Scandinavian literature and films, how they reflect Scandinavian reality, and how Scandinavian identity is created through sports, food, and politics. Only one of the following may be counted: Comparative Literature 323 (Topic: Contemporary Scandinavian Stories), 323 (Topic 10), European Studies 347 (Topic: Contemporary Scandinavian Stories), 347 (Topic 16), German, Scandinavian, and Dutch Studies 341J, Germanic Civilization 323E (Topic: Contemporary Scandinavian Stories), Scandinavian 373 (Topic: Contemporary Scandinavian Stories). Additional prerequisite: Upperdivision standing.

**Topic 11: Films of Ingmar Bergman.** Same as European Studies 347 (Topic 13) and German, Scandinavian, and Dutch Studies 331C. An introduction to the films of Ingmar Bergman. Only one of the following

may be counted: Comparative Literature 323 (Topic: Films of Ingmar Bergman), 323 (Topic 11), English 322 (Topic 18), European Studies 347 (Topic: Films of Ingmar Bergman), 347 (Topic 13), German, Scandinavian, and Dutch Studies 331C, Scandinavian 327 (Topic 9). Additional prerequisite: Upper-division standing.

**Topic 12: Hans Christian Andersen.** Same as European Studies 347 (Topic 14) and German, Scandinavian, and Dutch Studies 341E. Introduction to such Hans Christian Andersen tales as "The Little Mermaid," "The Ugly Duckling," and "The Emperor's New Clothes." Examination of their author and the romantic period in which they were written, as well as their historical, philosophical, and literary context. Only one of the following may be counted: Comparative Literature 323 (Topic: Hans Christian Andersen), 323 (Topic 12), English 322 (Topic 19), European Studies 347 (Topic: Hans Christian Andersen), 347 (Topic 14), German, Scandinavian, and Dutch Studies 341E, Germanic Civilization 323E (Topic 4), Scandinavian 373 (Topic 4). Additional prerequisite: Upper-division standing.

Topic 13: Introduction to Arabic Literature. Same as Islamic Studies 373 (Topic 1), Middle Eastern Languages and Cultures 321 (Topic 1), and Middle Eastern Studies 342 (Topic 1). General survey of major themes, genres, and artists in the Arabic literary tradition from the sixth century to the modern era. Only one of the following may be counted: Comparative Literature 323 (Topic: Introduction to Arabic Literature), 323 (Topic 13), Islamic Studies 373 (Topic 1), Middle Eastern Languages and Cultures 321 (Topic 1), Middle Eastern Studies 342 (Topic 1). Additional prerequisite: Upper-division standing. Topic 14: Isak Dinesen/Karen Blixen. Same as European Studies 347 (Topic 15), German, Scandinavian, and Dutch Studies 341G, and Women's and Gender Studies 345 (Topic 13). An introduction to the twentieth-century Danish author Karen Blixen, focusing on her major themes such as gender and destiny, and examining her role as a literary figure. Only one of the following may be counted: Comparative Literature 323 (Topic: Isak Dinesen/Karen Blixen), 323 (Topic 14), European Studies 347 (Topic: Isak Dinesen/Karen Blixen), 347 (Topic 15). German, Scandinavian, and Dutch Studies 341G. Germanic Civilization 323E (Topic 1), Scandinavian 373 (Topic 6), Women's and Gender Studies 345 (Topic 13). Additional prerequisite: Upper-division standing.

**Topic 15: Israel Through Its Literature.** Same as Jewish Studies 363 (Topic 17), Middle Eastern Languages and Cultures 321 (Topic 5), and Middle Eastern Studies 342 (Topic 5). Only one of the following may be counted: Comparative Literature 323 (Topic: Introduction to Israeli Literature), Comparative Literature 323 (Topic 15), English 322 (Topic: Introduction to Israeli Literature), Jewish Studies 363 (Topic 17), Middle Eastern Languages and Cultures 321 (Topic 5), Middle Eastern Studies 342 (Topic 5). Additional prerequisite: Upper-division standing.

Topic 16: The Scandinavian Contribution to World Literature. Same as European Studies 347 (Topic 17) and German, Scandinavian, and Dutch Studies 341K. Close readings of the most influential Scandinavian texts, including works by Nobel Prize-winning authors such as Knut Hamsun and Selma Lagerlof, as well as the playwrights August Strindberg and Henrik Ibsen while addressing important themes caused by the revolutionary transition to modernity in Scandinavia around 1900, including emancipation of women and sexuality. Only one of the following may be counted: Comparative Literature 323 (Topic: The Scandinavian Contribution to World Literature), 323 (Topic 16), European Studies 347 (Topic: The Scandinavian Contribution to World Literature), 347 (Topic 17), German, Scandinavian, and Dutch Studies 341K, Germanic Civilization 323E (Topic: The Scandinavian Contribution to World Literature), Scandinavian 373 (Topic: The Scandinavian Contribution to World Literature). Additional prerequisite: Upper-division standing. Topic 17: Social Dramas of Henrik Ibsen. Same as European Studies 347 (Topic 12), German, Scandinavian, and Dutch Studies 341D, and

Women's and Gender Studies 345 (Topic 14). A detailed introduction to Ibsen's social dramas (1877-1899), emphasizing their unity as a prolonged commentary on the society of his era and the variety of its human problems. Special emphasis on subjects such as: the family and the home; the public world of reputation, work, and citizenship; the predicaments of men and women in a male-dominated society; and the motives of our interventions into the lives of others. Only one of the following may be counted: Comparative Literature 323 (Topic: Social Dramas of Henrik Ibsen), 323 (Topic 17), English 322 (Topic 17), European Studies 347 (Topic: Social Dramas of Henrik Ibsen), 347 (Topic 12), German, Scandinavian, and Dutch Studies 341D, Scandinavian 323 (Topic 2), Women's and Gender Studies 345 (Topic 14). Additional prerequisite: Upper-division standing. Topic 18: Squaring the Vienna Circle. Same as European Studies 347 (Topic 20) and German, Scandinavian, and Dutch Studies 361F. Traces the origin of the Vienna Circle of Logical Empiricism in nineteenth-century Europe, and introduces central texts and problems of intellectual history and historical epistemology at the roots of today's analytic philosophy. Only one of the following may be counted: Comparative Literature 323 (Topic: Squaring the Vienna Circle), 323 (Topic 18), European Studies 347 (Topic: Squaring the Vienna Circle), 347 (Topic 20), German, Scandinavian, and Dutch Studies 361F, Germanic Civilization 362E (Topic: Squaring the Vienna Circle), Philosophy 327 (Topic: Squaring the Vienna Circle), 354 (Topic: Squaring the Vienna Circle). Additional prerequisite: Upper-division standing.

Topic 19: Women and the Holocaust. Same as European Studies 346 (Topic 10), German, Scandinavian, and Dutch Studies 341F, Jewish Studies 363 (Topic 11), and Women's and Gender Studies 340 (Topic 50). Introduction to both the history of Jewish and German women during World War II and the Holocaust, and to women's narratives and self-representations of this period. Historical sources, memoirs, films, and interviews will be used as source material. Three lecture hours a week for one semester. Only one of the following may be counted: Comparative Literature 323 (Topic: Women's Narratives of the Holocaust and World War II), 323 (Topic 19), European Studies 346 (Topic: Women's Narratives of the Holocaust and World War II), 346 (Topic 10), German, Scandinavian, and Dutch Studies 341F, Germanic Civilization 323E (Topic: Women's Narratives of the Holocaust and World War II), Jewish Studies 363 (Topic 11), Women's and Gender Studies 340 (Topic: Women's Narratives of the Holocaust and World War II), 340 (Topic 50). Additional prerequisite: Upper-division standing.

**Topic 20: Rebels and Revolutionaries in Russian History and Literature.** Same as History 362G (Topic 15) and Russian, East European, and Eurasian Studies 325 (Topic 24). Study of fictional and real rebels and revolutionaries across almost a century of Russian literature. Only one of the following may be counted: Comparative Literature 323 (Topic: Rebels and Revolutionaries in Russian History and Literature), 323 (Topic 20), History 362G (Topic: Rebels and Revolutionaries in Russian History and Literature), 362G (Topic 15), Russian 356 (Topic: Rebels and Revolutionaries in Russian History and Literature), 356 (Topic 4), Russian, East European, and Eurasian Studies 325 (Topic: Rebels and Revolutionaries in Russian History and Literature), 325 (Topic 24). Additional prerequisite: Upper-division standing.

**Topic 21: Russia and Its World.** Same as Humanities 350 (Topic 11) and Russian, East European, and Eurasian Studies 325 (Topic 21). Survey of the political, cultural, and social history of Russia, from its prehistoric origins to the installation of communist rule in 1917. Emphasis on the arts and on enduring themes of cultural identity, imagination, and conflict with neighboring peoples and within Russia. Only one of the following may be counted: Comparative Literature 323 (Topic: Russia and Its World), 323 (Topic 21), Humanities 350 (Topic: Russia and Its World), 350 (Topic 11), Russian 330 (Topic: Russia

and Its World), 330 (Topic 11), Russian, East European, and Eurasian Studies 325 (Topic: Russia and Its World), 325 (Topic 21). Additional prerequisite: Upper-division standing.

Topic 22: Twentieth-Century Russian Culture. Same as Humanities 350 (Topic 12) and Russian, East European, and Eurasian Studies 325 (Topic 14). Survey of the political, social, and cultural history of Russia during the Soviet period, from the revolutionary events of 1917 until the dissolution of the Soviet government and political system in December 1991. Only one of the following may be counted: Comparative Literature 323 (Topic: Twentieth-Century Russian Culture), 323 (Topic 22), Humanities 350 (Topic: Twentieth-Century Russian Culture), 350 (Topic 12), Russian 330 (Topic: Twentieth-Century Russian Culture), 330 (Topic 7), Russian, East European, and Eurasian Studies 325 (Topic: Twentieth-Century Russian Culture), 325 (Topic 14). Additional prerequisite: Upper-division standing. Topic 23: The Supernatural in Traditional Chinese Fiction. Same as Asian Studies 372 (Topic 36). Conducted in English. Introduction to Chinese notions of the supernatural and otherworldly phenomena in traditional Chinese literature and pseudohistory, focusing on the literary, cultural, historical, social, political, philosophical, and religious background against which representative works arose. Only one of the following may be counted: Asian Studies 372 (Topic: Supernatural in Traditional Chinese Fiction), 372 (Topic 36), Comparative Literature 323 (Topic: Supernatural in Traditional Chinese Fiction), 323 (Topic 23).

**Topic 24: Modern Indian Literature**. Same as Asian Studies 372 (Topic 39). Examines modern India through religious literary masterpieces, poems, short stories, essays, and memoirs, and how literature reveals an interconnected history and redefinition of cultural dynamics in everyday Indian life long after colonial rule. Only one of the following may be counted: Anthropology 324L (Topic: Modern India and Literature), Asian Studies 372 (Topic: Modern India and Literature), 372 (Topic 39), Comparative Literature 323 (Topic: Modern India and Literature), 323 (Topic 24).

**Topic 25: Visions of the Apocalypse in Russian Literature and Culture.** Same as Russian, East European, and Eurasian Studies 325 (Topic 12). Explores and analyzes apocalyptic consciousness in Russian literature and culture from the Middle Ages to the present. Emphasis will be on such themes as the expectation of the end of the world, identification of the Antichrist, messianic prophecy, and visions of an afterlife. Only one of the following may be counted: Comparative Literature 323 (Topic: The Apocalypse in Russian Literature and Culture), 323 (Topic 25), Russian 330 (Topic 5), Russian, East European, and Eurasian Studies 325 (Topic: The Apocalypse in Russian Literature and Culture), 325 (Topic 12). Prerequisite: Upperdivision standing.

**Topic 26: Living Epics of India.** Same as Asian Studies 372 (Topic 38) and Religious Studies 341 (Topic 14). Exploration of Indian epics in the Sanskritic textual heritage, performative arts, and regional language versions, and their impact in the formation of the values of the people of India. Only one of the following may be counted: Asian Studies 372 (Topic: Living Epics of India), 372 (Topic 38), Comparative Literature 323 (Topic: Living Epics of India), 323 (Topic 26), Theatre and Dance 357T (Topic: Living Epics of India), Religious Studies 341 (Topic: Living Epics of India), 341 (Topic 14).

**Topic 27: The Major Works of Tolstoy.** Same as Russian, East European, and Eurasian Studies 325 (Topic 16). Explores Russian writer Lev Nikolaevich Tolstoy, particularly his progression from idealizing family life and the Russian state to renouncing sexual love and national allegiances. Only one of the following may be counted: Comparative Literature 323 (Topic: The Major Works of Tolstoy), 323 (Topic 27), Russian 360 (Topic: Majors Works of Tolstoy), 360 (Topic 2), Russian, East European, and Eurasian Studies 325 (Topic: The Major Works of Tolstoy), 325 (Topic 16). Additional prerequisite: Upper-division standing. **Topic 28: Slavs in the Western Imagination.** Same as European Studies 347 (Topic 11) and Russian, East European, and Eurasian Studies 325 (Topic 15). Examines representations of Eastern, Western, and Southern Slavs in Western Europe and North America. Only one of the following may be counted: Comparative Literature 323 (Topic: Slavs in the Western Imagination), 323 (Topic 28), European Studies 347 (Topic: Slavs in the Western Imagination), 347 (Topic 11), Russian, East European, and Eurasian Studies 325 (Topic: Slavs in the Western Imagination), 325 (Topic 15), Slavic 324 (Topic: Slavs in the Western Imagination), 324 (Topic 4). Additional prerequisite: Upper-division standing.

**Topic 29: The Russian Novel.** Same as Core Texts and Ideas 345 (Topic 6) and Russian, East European, and Eurasian Studies 325 (Topic 9). A survey of classic Russian authors as well as experimental works from the nineteenth through the twenty-first century. Only one of the following may be counted: Comparative Literature 323 (Topic: The Russian Novel), 323 (Topic 29), Core Texts and Ideas 345 (Topic: The Russian Novel), 345 (Topic 6), English 322 (Topic 37), European Studies 347 (Topic 22), Russian 356 (Topic 1), Russian, East European, and Eurasian Studies 325 (Topic 9). Additional prerequisite: Upper-division standing.

**Topic 30: The Major Works of Dostoevsky.** Same as Core Texts and Ideas 345 (Topic 5) and Russian, East European, and Eurasian Studies 325 (Topic 10). Explores the dilemmas of homicide, suicide, patricide, and redemption in the novels of Fyodor Dostoevsky. Only one of the following may be counted: Comparative Literature 323 (Topic: The Major Works of Dostoevsky), 323 (Topic 30), Core Texts and Ideas 345 (Topic: Major Works of Dostoevsky), 345 (Topic 5), European Studies 347 (Topic: Major Works of Dostoevsky), 347 (Topic 10), Russian 360 (Topic: Major Works of Dostoevsky), 360 (Topic 1), Russian, East European and Eurasian Studies 325 (Topic: Major Works of Dostoevsky), 325 (Topic 10). Additional prerequisite: Upper-division standing.

**Topic 31: War and Revolution in Russian Literature and Culture.** Same as Core Texts and Ideas 345 (Topic 8) and Russian, East European, and Eurasian Studies 325 (Topic 18). Examines Russian narratives of war and revolution as represented in fiction, cinema, and journalism. Only one of the following may be counted: Comparative Literature 323 (Topic: War and Peace in Russian Literature and Culture), 323 (Topic 31), Core Texts and Ideas 345 (Topic: War and Peace in Russian Literature and Culture), 345 (Topic 8), Russian 356 (Topic: War and Peace in Russian Literature and Culture), 345 (Topic 8), Russian 356 (Topic 3), Russian, East European, and Eurasian Studies 325 (Topic: War and Peace in Russian Literature and Culture), 325 (Topic 18). Additional prerequisite: Upperdivision standing.

Topic 33: Feminism and Film: Women Filmmakers in Northern and Central Europe. Same as European Studies 347 (Topic 24), German, Scandinavian, and Dutch Studies 331D, and Women's and Gender Studies 340 (Topic 65). An introduction to the work of women filmmakers from Scandinavia, Germany, as well as to the viewing and interpretation of films in general. Three lecture hours a week for one semester. Only one of the following may be counted: Comparative Literature 323 (Topic: Women Filmmakers in Northern and Central Europe), 323 (Topic 33), European Studies 347 (Topic: Women Filmmakers in Northern and Central Europe), 347 (Topic 24), German, Scandinavian, and Dutch Studies 330 (Topic: Women Filmmakers in Northern and Central Europe), 331D, Women's and Gender Studies 340 (Topic: Women Filmmakers in Northern and Central Europe), 340 (Topic 65). Additional prerequisite: Upper-division standing. Topic 34: Russian Myths and Folktales. Same as Anthropology 325L (Topic 12) and Russian, East European, and Eurasian Studies 325 (Topic 22). Examination of the Russian folktale, its roots in ancient, pre-Christian Slavic religious tradition, its connections with other forms of folklore such as myth and legend, and its transformation in modern Russian literature. Subjects include the continuing influence

of folklore explored through various aspects of Russian culture, including literature, music, ballet, film, and popular culture. Only one of the following may be counted: Anthropology 325L (Topic: Russian Myths and Folk Tales), 325L (Topic 12), Comparative Literature 323 (Topic: Russian Myths and Folk Tales), 323 (Topic 34), Russian 330 (Topic: Russian Myths and Folk Tales), 330 (Topic 9), Russian, East European and Eurasian Studies 325 (Topic: Russian Myths and Folk Tales), 325 (Topic 22). Additional prerequisite: Upper-division standing.

Topic 36: Love in the East and West. Same as Core Texts and Ideas 345 (Topic 10), Middle Eastern Languages and Cultures 321 (Topic 25), and Middle Eastern Studies 342 (Topic 33). Three lecture hours a week for one semester. Only one of the following may be counted: Comparative Literature 323 (Topic: Love in the East and West), Comparative Literature 323 (Topic 36), Core Texts and Ideas 345 (Topic: Love in the East and West), Core Texts and Ideas 345 (Topic 10), Middle Eastern Languages and Cultures 321 (Topic: Love in the East and West), Middle Eastern Languages and Cultures 321 (Topic 25), Middle Eastern Studies 321K (Topic: Love in the East and West), Middle Eastern Studies 342 (Topic 33), Turkish 372 (Topic: Love in the East and West). Additional prerequisite: Upper-division standing. Topic 37: The Qur'an. Same as Core Texts and Ideas 375 (Topic 1), Islamic Studies 340 (Topic 2), Middle Eastern Languages and Cultures 321 (Topic 9), Middle Eastern Studies 342 (Topic 16), Religious Studies 325G, and Women's and Gender Studies 340 (Topic 54). The history, language, style, and themes of the Qur'an. Only one of the following may be counted: Comparative Literature 323 (Topic: The Qur'an), 323 (Topic 37), Core Texts and Ideas 375 (Topic: The Qur'an), Core Texts and Ideas 375 (Topic 1), Islamic Studies 340 (Topic 2), Middle Eastern Languages and Cultures 321 (Topic 9), Middle Eastern Studies 342 (Topic 16), Religious Studies 325G, Women's and Gender Studies 340 (Topic: The Qur'an), 340 (Topic 54). Additional prerequisite: Upper-division standing.

**Topic 38: Postcolonial Women Writers.** Same as African and African Diaspora Studies 372C (Topic 15) and Women's and Gender Studies 340 (Topic 64). Literary exploration of how postcolonial women across the world view their positions as citizens, migrants, workers, parents, activists, and artists in the new millennium. Subjects include the effects of imperialism in women's lives, western feminisms developed to address global women's needs, and what new possibilities for decolonization, feminism, and creativity remain to be explored. Only one of the following may be counted: African and African Diaspora Studies 372C (Topic: Postcolonial Women Writers), 372C (Topic 15), Comparative Literature 323 (Topic: Postcolonial Women Writers), 323 (Topic 38), English 370W (Topic: Postcolonial Women Writers), Women's and Gender Studies 340 (Topic: Postcolonial Women Writers), 340 (Topic 64).

**Topic 40: Holocaust Aftereffects.** Same as European Studies 346 (Topic 23), German, Scandinavian, and Dutch Studies 360 (Topic 1), Jewish Studies 365 (Topic 14), Religious Studies 357 (Topic 18), and Women's and Gender Studies 340 (Topic 66). Explores the historical, political, psychological, theological, and cultural fallout of the Holocaust, as well as literary and cinematic responses in Europe and the United States. Only one of the following may be counted: Comparative Literature 323 (Topic: Holocaust Aftereffects), 323 (Topic 40), European Studies 346 (Topic: Holocaust Aftereffects), 346 (Topic 23), German, Scandinavian, and Dutch Studies 360 (Topic 1), Germanic Civilization 323E (Topic: Holocaust Aftereffects), Jewish Studies 365 (Topic: Holocaust Aftereffects), 365 (Topic 14), Liberal Arts Honors 350 (Topic: Holocaust Aftereffects), Religious Studies 357 (Topic: Holocaust Aftereffects), 357 (Topic 18), Women's and Gender Studies 340 (Topic: Holocaust Aftereffects), 340 (Topic 66).

**Topic 41: Decoding Classical Chinese Poetry.** Same as Asian Studies 372 (Topic 10). Introduction to the classical Chinese poetic tradition from the seventh century B.C.E. through the ninth century

C.E., focusing on the literary, cultural, historical, social, political, philosophical, and religious background against which representative works arose. Conducted in English and all readings will be in English translation. Knowledge of the Chinese language is not required. Only one of the following may be counted: Asian Studies 372 (Topic: Decoding Classical Chinese Poetry), 372 (Topic 10), Comparative Literature 323 (Topic: Decoding Classical Chinese Poetry), 323 (Topic 41). Additional prerequisite: Upper-division standing.

**Topic 42: Anti-Semitism in History and Literature.** Same as European Studies 346 (Topic 29), German, Scandinavian, and Dutch Studies 361L, and Jewish Studies 364 (Topic 1). Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic: Anti-Semitism in History and Literature), 346 (Topic 29), Comparative Literature 323 (Topic: Anti-Semitism in History and Literature), 323 (Topic 42), German, Scandinavian, and Dutch Studies 360 (Topic: Anti-Semitism in History and Literature), 361L, Jewish Studies 361 (Topic: Anti-Semitism in History and Literature), 364 (Topic 1). Additional prerequisite: Upper-division standing.

**Topic 43: Vikings and Their Literature.** Same as European Studies 347 (Topic 35) and German, Scandinavian, and Dutch Studies 341L. Three lecture hours a week for one semester. Only one of the following may be counted: Anthropology 324L (Topic: Vikings and Their Literature), Comparative Literature 323 (Topic: Vikings and Their Literature), 323 (Topic 43), English 322 (Topic: Vikings and Their Literature), European Studies 347 (Topic: Vikings and Their Literature), 347 (Topic: 35), 361 (Topic: Vikings and Their Literature), 347 (Topic: Vikings and Their Literature), 341L, Germanic Civilization 323E (Topic: Vikings and Their Literature), Scandinavian 323 (Topic: Vikings and Their Literature). Additional prerequisite: Upper-division standing.

**Topic 44: Berlin.** Same as European Studies 347 (Topic 34), German, Scandinavian, and Dutch Studies 361M, History 362G (Topic 17), and Urban Studies 353 (Topic 7). Three lecture hours a week for one semester. Only one of the following may be counted: Comparative Literature 323 (Topic: Berlin), 323 (Topic 44), European Studies 347 (Topic: Berlin), 347 (Topic 34), German, Scandinavian, and Dutch Studies 360 (Topic: Berlin), 361M, Germanic Civilization 327E (Topic: Berlin), History 362G (Topic: Berlin), 362G (Topic 17), Urban Studies 353 (Topic: Berlin), 353 (Topic 7). Additional prerequisite: Upperdivision standing.

#### C L 358Q. Supervised Research.

Individual instruction. Prerequisite: Upper-division standing.

# Thomas Jefferson Center for the Study of Core Texts and Ideas

## Core Texts and Ideas: CTI

#### **Lower-Division Courses**

#### CTI 301. Ancient Philosophy and Literature.

Studies classical philosophy and literature, primarily from ancient Greece, to explore fundamental questions about human nature, justice, ethics, and humanity's place in the cosmos. Readings include one or more masterpieces of epic or tragedy and one or more dialogues of Plato. Three lecture hours or two lecture hours and one discussion hour a week for one semester.

#### CTI 301G. Introduction to Ancient Greece.

Same as Classical Civilization 301. Greatness of Greece as reflected in Greek history, literature, philosophy, art, religion, and politics. No knowledge of Greek is required. Three lecture hours a week for one semester. Only one of the following may be counted: Classical Civilization 301, Core Texts and Ideas 310 (Topic: Introduction to Ancient Greece), 301G.

#### CTI 302. Classics of Social and Political Thought.

Same as Government 314 (Topic 10). Explores the origins of social scientific thought in the history of political philosophy and traces the development of one or more of the social sciences in modern times. Focuses on fundamental ideas about human nature, civil society, and politics, explored through reading such authors as Aristotle, Aquinas, Locke, Rousseau, Marx, Weber, Durkheim, and Freud. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Core Texts and Ideas 302, Government 314 (Topic: Classics of Social and Political Thought), 314 (Topic 10).

#### CTI 303. Competing Visions of the Good Life.

Same as Government 314 (Topic 6). Introduces the great rival conceptions of the moral basis and goals of political life as elaborated by revolutionary thinkers throughout the history of political philosophy, including Aristotle, Aquinas, Locke, late modern critics of the Enlightenment, and others. Core Texts and Ideas 303 and Government 314 (Topic 6) may not both be counted.

#### CTI 304. World Religions: Traditions and Texts.

A study of basic religious texts, including both the Hebrew Bible and New Testament, examined from various perspectives (including comparative, historical, philosophical, and literary), with emphasis on the fundamental questions and ideas raised in those texts. Three lecture hours or two lecture hours and one discussion hour a week for one semester. May be repeated for credit when the topics vary.

**Topic 1: The Bible and Its Interpreters.** Same as Religious Studies 315 (Topic 1). Seeks to develop a wide-ranging familiarity with the Jewish and Christian Bibles and with the dominant modes of ancient, medieval, and early modern biblical interpretation. Readings include an extensive range of primary sources, including both the Scriptures themselves and some of their most influential exegetes. Only one of the following may be counted: Core Texts and Ideas 304 (Topic 1), Religious Studies 315 (Topic: The Bible and Its Interpreters), Religious Studies 315 (Topic 1).

#### CTI 305G. Introduction to the Old Testament.

Same as Jewish Studies 311 (Topic 4), Middle Eastern Studies 310 (Topic 3), and Religious Studies 313C. Introduction to the many interpretations of the Hebrew Bible (the Old Testament) and its meaning in the context of its historical and cultural setting in the ancient Near East. Three lecture hours a week for one semester. Only one of the following may be counted: Core Texts and Ideas 305G, 310 (Topic: Introduction to the Hebrew Bible), Jewish Studies 311 (Topic: Introduction to the Hebrew Bible), 311 (Topic 4), Middle Eastern Studies 310 (Topic: Introduction to the Hebrew Bible), 310 (Topic 3), Religious Studies 313 (Topic: Introduction to the Hebrew Bible), 313C.

#### CTI 310. Topics in Core Texts and Ideas.

Introduction to fundamental texts and questions that have helped shape the world. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Core Texts and Ideas 310 and Western Civilization 303 may not both be counted unless the topics vary. May be repeated for credit when the topics vary.

**Topic 3: Introduction to the Philosophy of Religion.** Same as Philosophy 305 and Religious Studies 305. A critical examination of various conceptions of God and of the relationship of the human and the divine. Three lecture hours or two lecture hours and one laboratory/discussion hour a week for one semester. Only one of the following may be counted: Core Texts and Ideas 310 (Topic: Introduction to the Philosophy of Religion), 310 (Topic 3), Philosophy 305, Religious Studies 305.

#### CTI 111. Core Texts Seminar.

Close reading and discussion of primary sources, normally pursued in conjunction with another three-hour course in a field of study such as history or government. One discussion hour a week for one semester. May be repeated for credit when the topics vary.

## **Upper-Division Courses**

#### CTI 320. The Classical Quest for Justice.

Same as Government 351C. Introduces students to classical political thought through a study of seminal works of antiquity, focusing on those of Plato and Aristotle. Three lecture hours a week for one semester. Only one of the following may be counted: Core Texts and Ideas 320, 335 (Topic: Classical Quest for Justice), Government 335M (Topic: Classical Quest for Justice), 351C. Prerequisite: Completion of at least thirty semester hours of coursework.

#### CTI 321. The Theoretical Foundations of Modern Politics.

Same as Government 351D. Examines competing foundations of the ongoing development of political and social modernity. Examines a selection of major authors from Machiavelli to Nietzsche. Three lecture hours a week for one semester. Only one of the following may be counted: Core Texts and Ideas 321, 335 (Topic: The Theoretical Foundations of Modern Politics), Government 335M (Topic: The Theoretical Foundations of Modern Politics), 351D Western Civilization 320 (Topic: The Theoretical Foundations of Modern Politics). Prerequisite: Completion of at least thirty semester hours of coursework.

#### CTI 321F. Spinoza and Modernity.

Same as European Studies 346 (Topic 21), History 362P, Jewish Studies 364 (Topic 9), Philosophy 354 (Topic 7), and Religious Studies 357 (Topic 8). Introduction to the core of Spinoza's writings and the diverse reactions they have elicited. Examines Spinoza's refusal of mind-body dualism, as well as a transcendent god or ideal as a way of understanding Spinoza's concepts and ideas. Three lecture hours a week for one semester. Only one of the following may be counted: Core Texts and Ideas 335 (Topic: Spinoza and Modernity), 321F, European Studies 346 (Topic: Spinoza and Modernity), 346 (Topic 21), 347 (Topic: Spinoza and Modernity), History 362G (Topic: Spinoza and Modernity), 362P, Jewish Studies 364 (Topic: Spinoza and Modernity), 354 (Topic: Spinoza and Modernity), 354 (Topic 7), Religious Studies 357 (Topic: Spinoza and Modernity), 357 (Topic 8). Prerequisite: Upper-division standing.

#### CTI 322. Critics of Modern Liberalism.

Same as Government 351G. Selected critics of the philosophy of the Enlightenment from both the Left and the Right, and from the time of Rousseau to the present. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Core Texts and Ideas 322, Government 335M (Topic: Liberalism and its Critics), 351G. Prerequisite: Upper-division standing.

#### CTI 323. Might and Right among Nations.

Same as Government 351J. Major alternative approaches to the question of the moral character of international relations, as elaborated by some of the greatest political thinkers. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Core Texts and Ideas 323, 335 (Topic: Might and Right among Nations), Government 335M (Topic: Might and Right among Nations), 351J, Western Civilization 320 (Topic: Might and Right among Nations). Prerequisite: Upper-division standing and six semester hours of lower-division coursework in government.

#### CTI 324. Politics and Literature.

Same as Government 335M (Topic 15). Explores the "old battle between the poets and philosophers," in which the two sides battle for recognition as the deepest source of wisdom about politics and ethics. Includes readings from great works of political philosophy and literature. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Core Texts and Ideas 324, Government 335M (Topic: Politics and Literature), 335M (Topic 15). Prerequisite: Upper-division standing and six semester hours of lower-division coursework in government.

#### CTI 325. Morality and Politics.

Same as Government 351L. Interdisciplinary readings from major works exploring issues of ethics and leadership. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Core Texts and Ideas 325, Government 335M (Topic: Morality and Politics), 351L. Prerequisite: Upper-division standing.

#### CTI 326. Core Texts on American Democracy.

A close study of major texts and documents that shed light on fundamental issues in American democracy such as rights, equality, individual liberty, and the proper ends and limits of government. Three lecture hours or two lecture hours and one discussion hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Constitutional Interpretation.** Same as Government 357M (Topic 5). Designed to improve reasoning and communication skills through constitutional interpretation. Determining what the Constitution means, how to determine what it means, and who should determine what it means. Only one of the following may be counted: Core Texts and Ideas 326 (Topic: Constitutional Interpretation), 326 (Topic 1), Government 357M (Topic: Constitutional Interpretation), 357M (Topic 5). Prerequisite: Six semester hours of lower-division coursework in government.

**Topic 2: The Tragicomedy of American Democracy.** Same as African and African Diaspora Studies 372F (Topic 15) and American Studies 370 (Topic 44). Examines the foundational ideas and practices essential to the unfolding of American democracy by focusing on founding documents, public speeches, major political conflicts, and canonical texts of political philosophy. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: Tragicomedy of American Democracy), 372F (Topic 15), American Studies 370 (Topic: Tragicomedy of American Democracy), 370 (Topic 44), Core Texts and Ideas 326 (Topic: Tragicomedy of American Democracy), 326 (Topic 2), Western Civilization 320 (Topic: Tragicomedy of American Democracy).

**Topic 3:** African American Social and Political Thought. Same as African and African Diaspora Studies 374D (Topic 21), American Studies 321J, and Government 335M (Topic 10). Examines the speeches and writings by major theorists and critics of the prophetic tradition of black political thought. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: African American Social and Political Thought), 374D (Topic 21), American Studies 321 (Topic: African American Social and Political Thought), 321J, Core Texts and Ideas 326 (Topic 3), 335 (Topic: African American Social and Political Thought), 335M (Topic: African American Social and Political Thought), 335M (Topic 10). Additional prerequisite: Upperdivision standing and six semester hours of lower-division coursework in government.

#### CTI 335. Core Texts in Philosophy.

Three lecture hours or two lecture hours and one discussion hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 2: History of Christian Philosophy.** Same as Philosophy 354 (Topic 2). Examines the history of Christian philosophy through classic Christian thought, concerning what can be known and how people should live. Only one of the following may be counted: Core Texts and Ideas 335 (Topic: History of Christian Philosophy), 335 (Topic 2), Philosophy 354 (Topic: History of Christian Philosophy), 354 (Topic 2). Prerequisite: Upper-division standing.

**Topic 3: Hegel and the Formation of Modern European Identity.** Same as European Studies 348 (Topic 6) and Government 335M (Topic 13). An in-depth study of how Hegel identifies the social conditions necessary for personal self-realization but also for freedom by means of political community. Only one of the following may be counted: Core Texts and Ideas 335 (Topic: Hegel and the Formation of Modern European Identity), 335 (Topic 3), European Studies 348 (Topic 6), Government 335M (Topic: Hegel and the Formation of Modern European Identity), 335M (Topic: Hegel and the Formation of Modern European Identity), 335M (Topic 13). Additional prerequisite: Upper-division standing and six semester hours of lower-division coursework in government.

**Topic 4: Origins of Liberalism**. Same as Philosophy 354 (Topic 5). Only one of the following may be counted: Core Texts and Ideas 335 (Topic: Origins of Liberalism), 335 (Topic 4), European Studies 346 (Topic: Origins of Liberalism), Philosophy 354 (Topic: Origins of Liberalism), 354 (Topic 5). Additional prerequisite: Upper-division standing. **Topic 5: Women in the History of Political Thought**. Same as Government 335M (Topic 17) and Women's and Gender Studies 345 (Topic 32). Examines the themes of women, the family, and the private sphere in the history of political theory. Only one of the following may be counted: Core Texts and Ideas 335 (Topic: Women in Hist of Polit Thought), 335 (Topic 5), Government 335M (Topic: Women in History of Political Thought), 335M (Topic 17), Women's and Gender Studies 345 (Topic: Women in History of Political Thought), 345 (Topic 32). Additional prerequisite: Upper-division standing and six semester hours of lower-division coursework in government.

**Topic 7: The Sacred and the Secular in Modern European Thought.** Same as European Studies 346 (Topic 32), History 362G (Topic 19), and Religious Studies 357 (Topic 20). Introduces key themes and methodologies of intellectual history and social theory by exploring the dueling approaches to secularization and sacralization in modern European thought. Only one of the following may be counted: Core Texts and Ideas 335 (Topic: Sacred and Secular in Modern European Thought), 335 (Topic 7), European Studies 346 (Topic: Sacred and Secular in Modern European Thought), 346 (Topic 32), History 362G (Topic: Sacred and Secular in Modern European Thought), 362G (Topic: 19), Religious Studies 357 (Topic 20). Additional prerequisite: Upperdivision standing.

#### CTI 345. Core Texts in Literature.

Major works of literature from one or more cultures, studied with special attention to questions of universal human concern. Three lecture hours or two lecture hours and one discussion hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 2: Satan and the Idea of Evil.** Explores the history and breadth of Satan's role as a character (or background presence) in literature while developing close-reading techniques for literary analysis that can be applied across diverse eras, forms, and genres. Only one of the following may be counted: Core Texts and Ideas 345 (Topic: Satan and

the Idea of Evil), 345 (Topic 2), Religious Studies 357 (Topic: Satan and the Idea of Evil). Prerequisite: Upper-division standing.

**Topic 3: Moral Agency In Greek Tragedy.** Same as Classical Civilization 348 (Topic 16). Subjects include the masterpieces of Greek tragedy, the social and cultural background of the texts, and questions posed by the texts. Only one of the following may be counted: Classical Civilization 348 (Topic: Moral Agency In Greek Tragedy), 348 (Topic 16), Core Texts and Ideas 345 (Topic: Moral Agency In Greek Tragedy), 345 (Topic 3).

**Topic 5: The Major Works of Dostoevsky.** Same as Comparative Literature 323 (Topic 30) and Russian, East European, and Eurasian Studies 325 (Topic 10). Explores the dilemmas of homicide, suicide, patricide, and redemption in the novels of Fyodor Dostoevsky. Only one of the following may be counted: Comparative Literature 323 (Topic: The Major Works of Dostoevsky), 323 (Topic 30), Core Texts and Ideas 345 (Topic: Major Works of Dostoevsky), 345 (Topic 5), European Studies 347 (Topic: Major Works of Dostoevsky), 347 (Topic 10), Russian 360 (Topic: Major Works of Dostoevsky), 360 (Topic 1), Russian, East European and Eurasian Studies 325 (Topic: Major Works of Dostoevsky), 325 (Topic 10). Additional prerequisite: Upper-division standing.

**Topic 6: The Russian Novel.** Same as Comparative Literature 323 (Topic 29) and Russian, East European, and Eurasian Studies 325 (Topic 9). A survey of classic Russian authors as well as experimental works from the nineteenth through the twenty-first century. Only one of the following may be counted: Comparative Literature 323 (Topic: The Russian Novel), 323 (Topic 29), Core Texts and Ideas 345 (Topic: The Russian Novel), 345 (Topic 6), English 322 (Topic 37), European Studies 347 (Topic 22), Russian 356 (Topic 1), Russian, East European, and Eurasian Studies 325 (Topic 9). Additional prerequisite: Upper-division standing.

**Topic 8: War and Revolution in Russian Literature and Culture.** Same as Comparative Literature 323 (Topic 31) and Russian, East European, and Eurasian Studies 325 (Topic 18). Examines Russian narratives of war and revolution as represented in fiction, cinema, and journalism. Only one of the following may be counted: Comparative Literature 323 (Topic: War and Peace in Russian Literature and Culture), 323 (Topic 31), Core Texts and Ideas 345 (Topic: War and Peace in Russian Literature and Culture), 345 (Topic 8), Russian 356 (Topic: War and Peace in Russian Literature and Culture), 345 (Topic 8), Russian 356 (Topic 3), Russian, East European, and Eurasian Studies 325 (Topic: War and Peace in Russian Literature and Culture), 325 (Topic 18). Additional prerequisite: Upperdivision standing.

Topic 9: Ancient Epic. Same as Classical Civilization 322 (Topic 4). Only one of the following may be counted: Classical Civilization 322 (Topic 4), 322 (Topic: Epic Tradition: From Homer to Tennyson), Core Texts and Ideas 345 (Topic: Ancient Epic), 345 (Topic 9). Topic 10: Love in the East and West. Same as Comparative Literature 323 (Topic 36), Middle Eastern Languages and Cultures 321 (Topic 25), and Middle Eastern Studies 342 (Topic 33). Three lecture hours a week for one semester. Only one of the following may be counted: Comparative Literature 323 (Topic: Love in the East and West), Comparative Literature 323 (Topic 36), Core Texts and Ideas 345 (Topic: Love in the East and West), Core Texts and Ideas 345 (Topic 10), Middle Eastern Languages and Cultures 321 (Topic: Love in the East and West), Middle Eastern Languages and Cultures 321 (Topic 25), Middle Eastern Studies 321K (Topic: Love in the East and West), Middle Eastern Studies 342 (Topic 33), Turkish 372 (Topic: Love in the East and West). Additional prerequisite: Upper-division standing. Topic 11: Epics and Heroes of India. Same as Ancient History and Classical Civilization 330 (Topic 2), Asian Studies 372 (Topic 40), and History 350L (Topic 54). Only one of the following may be counted: Ancient History and Classical Civilization 330 (Topic: Epics and Heroes of India), 330 (Topic 2), Asian Studies 372 (Topic: Epics and

Heroes of India), 372 (Topic 40), Core Texts and Ideas 345 (Topic: Epics and Heroes of India), 345 (Topic 11), History 350L (Topic 54).

#### CTI 350. Masterworks of World Drama.

Studies major tragedies, comedies, and historical plays from various epochs, including at least one of Shakespeare's plays. Explores themes related to ethics, politics, and human nature, as well as the craft of the playwright. Students attend and discuss at least one play performance. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Prerequisite: Upper-division standing.

#### CTI 351. The Idea of the Beautiful.

Classical philosophical discussions of the idea of the beautiful (or noble or sublime), illustrated through selected works of art, drama, and literature. Explores the human perception of and response to beauty and its relation to such ideas as happiness and the promise of happiness, moral nobility or selflessness, and the divine. Philosophical works are studied in connection with examples drawn from the arts and are considered in their historical contexts. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Prerequisite: Upper-division standing.

#### CTI 365. Classics of Social Scientific Thought.

Same as Government 335P. Studies a selection of foundational modern classics in economics, psychology, sociology, political science, and anthropology, drawn mainly from the nineteenth and twentieth centuries. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Core Texts and Ideas 365, Government 335M (Topic: Classics of Social Scientific Thought), 335P. Prerequisite: Upper-division standing.

#### CTI 366. Topics in Economic and Social Thought.

Three lecture hours or two lecture hours and one discussion hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

#### CTI 370. Core Texts of Science and Mathematics.

Studies works of major scientists, mathematicians, and philosophers, and explores the fundamental ideas from one discipline or time period and the nature and grounds of human knowledge. Three lecture hours or two lecture hours and one discussion hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 2: Biology, Behavior, and Injustice.** Same as History 322R. Explores questions about human behavior related to biological factors as compared with personal experiences and societal standards. Three lecture hours a week for one semester. Only one of the following may be counted: Core Texts and Ideas 370 (Topic: Biology, Behavior, and Injustice), 370 (Topic 2), History 322R, 366N (Topic: Biology, Behavior, and Injustice), 366N (Topic 16). Additional prerequisite: Upper division standing.

#### CTI 371. Einstein in the Age of Conflict.

Same as History 350L (Topic 64: Einstein in the Age of Conflict). Following the life and work of Albert Einstein, course examines the rise of the theories of relativity and quantum mechanics upon the stage of international political upheaval. Three lecture hours a week for one semester. Only one of the following may be counted: Core Texts and Ideas 370 (Topic: Einstein in the Age of Conflicts), 371, History 350L (Topic 64). Prerequisite: Upper-division standing.

#### CTI 372. Darwin and the Politics of Evolution.

Same as Government 353D. A careful reading of Darwin's influential Origin of the Species by Means of Natural Selection, together with an examination of the religious, political, and scientific controversies the book has inspired from its first publication to the present day. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Core Texts and Ideas 370 (Topic: The Politics of Evolution), 372, Government 335M (Topic: The Politics of Evolution), 353D. Prerequisite: Upperdivision standing and six semester hours of lower-division coursework in government.

#### CTI 375. Topics in Core Texts and Ideas.

Study of classic texts, connected historically or thematically. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Core Texts and Ideas 375 and Western Civilization 320 may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: The Qur'an.** Same as Comparative Literature 323 (Topic 37), Islamic Studies 340 (Topic 2), Middle Eastern Languages and Cultures 321 (Topic 9), Middle Eastern Studies 342 (Topic 16), Religious Studies 325G, and Women's and Gender Studies 340 (Topic 54). The history, language, style, and themes of the Qur'an. Only one of the following may be counted: Comparative Literature 323 (Topic: The Qur'an), 323 (Topic 37), Core Texts and Ideas 375 (Topic: The Qur'an), Core Texts and Ideas 375 (Topic 1), Islamic Studies 340 (Topic 2), Middle Eastern Languages and Cultures 321 (Topic 9), Middle Eastern Studies 342 (Topic 16), Religious Studies 325G, Women's and Gender Studies 340 (Topic: The Qur'an), 340 (Topic 54). Additional prerequisite: Upper-division standing.

**Topic 2: Islamic Theology.** Same as Islamic Studies 340 (Topic 7), Middle Eastern Languages and Cultures 321 (Topic 27), Middle Eastern Studies 342 (Topic 35), and Religious Studies 358 (Topic 14). Three lecture hours per week for one semester. Only one of the following may be counted: Core Texts and Ideas 375 (Topic: Islamic Theology), 375 (Topic 2), Islamic Studies 340 (Topic: Islamic Theology), 340 (Topic 7), Middle Eastern Languages and Cultures 321 (Topic: Islamic Theology), 321 (Topic: 27), Middle Eastern Studies 321K (Topic: Islamic Theology), 342 (Topic: Islamic Theology), 342 (Topic 35), Religious Studies 358 (Topic: Islamic Theology), 358 (Topic 14). Additional prerequisite: Upper-division standing.

**Topic 3: Enlightenment and Revolution.** Same as European Studies 346 (Topic 14) and History 350L (Topic 81). Examines the relationship between the intellectual project of the Enlightenment and the political and social transformations that unfolded in western Europe and North America from the beginnings of the Dutch Revolt in the 1560s to the decade following the Paris Commune of 1871. Only one of the following may be counted: Core Texts and Ideas 375 (Topic: Enlightenment and Revolution), 375 (Topic 3), European Studies 346 (Topic: Enlightenment and Revolution), 346 (Topic 14), History 350L (Topic: Enlightenment and Revolution), 350L (Topic 81). Additional prerequisite: Upper-division standing.

**Topic 4: Art and the City in Renaissance Italy.** Same as Art History 331P and European Studies 347 (Topic 33). Art, architecture, and emerging civic identity in Florence, Siena, Venice, and other Italian Renaissance city-states. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 331P, 364 (Topic: Art and the City in Renaissance Italy), Core Texts and Ideas 375 (Topic: Art and the City in Renaissance Italy), 375 (Topic 4), European Studies 347 (Topic: Art and the City in Renaissance Italy), 347 (Topic 33), Italian Civilization 349 (Topic: Art and the City in Renaissance Italy), Western Civilization 320 (Topic: Art and the City in Renaissance Italy).

**Topic 6: The Bible in the Colonial Americas.** Same as History 363K (Topic 5), Latin American Studies 366 (Topic 34), and Religious Studies 366 (Topic 3). Varied perspectives on the central role played by the Old Testament in the construction of colonial cultures in the

Americas. Only one of the following may be counted: Core Texts and Ideas 375 (Topic: The Bible in the Colonial Americas), 375 (Topic 6), History 363K (Topic: The Bible in the Colonial Americas), 363K (Topic 5), Latin American Studies 366 (Topic: The Bible in the Colonial Americas), 366 (Topic 34), Religious Studies 366 (Topic: The Bible in the Colonial Americas), 366 (Topic 3). Additional prerequisite: Upperdivision standing.

**Topic 7: Archaic and Classical Greece.** Same as Ancient History and Classical Civilization 325 (Topic 7) and History 354E. Survey of Greek history from the emergence of the city-states to the rise of Macedonia. Two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Ancient History and Classical Civilization 325 (Topic 4), 325 (Topic 7), Classical Civilizations 354C, Core Texts and Ideas 375 (Topic: Archaic and Classical Greece), 375 (Topic 7), History 354C, 354E. Additional prerequisite: Upper-division standing.

**Topic 8: Values and Leadership in Ancient World.** Same as Classical Civilization 348 (Topic 23). Only one of the following may be counted: Classical Civilization 348 (Topic: Values and Leadership in Ancient World), 348 (Topic 23), Core Texts and Ideas 375 (Topic: Values and Leadership in Ancient World), 375 (Topic 8), History 350L (Topic: Values and Leadership in Ancient World). Additional prerequisite: Upper-division standing.

#### CTI 379. Conference Course.

Intensive tutorial study of selected major texts. Individual instruction. May be repeated for credit. Prerequisite: Upper-division standing and consent of the director of the Jefferson Center and instructor.

## Américo Paredes Center for Cultural Studies

## **Cultural Studies: CLS**

### **Lower-Division Courses**

CLS 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Folklore and Cultural Studies.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in cultural studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### CLS 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Folklore and Cultural Studies.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in cultural studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

## CLS 340. Conference Course in Folklore and Cultural Studies.

Supervised reading and research on a folklore or cultural studies subject, including the writing of an original paper. Conference course. Prerequisite: Upper-division standing and a concentration in cultural studies.

## **Department of Economics**

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

## **Economics: ECO**

### **Lower-Division Courses**

#### ECO 301. Introduction to Economics.

Introduction to the structure and functioning of the aggregate economy and specific markets, including the labor market, housing market, and financial markets. Basic concepts of market regulation and monetary and fiscal policy. Concepts used in the social and behavioral sciences for measuring and interpreting economic data. Three lecture hours a week for one semester. May not be counted toward a major in economics.

## ECO 304K (TCCN: ECON 2302). Introduction to Microeconomics.

Analysis of the economic behavior of individual consumers, firms, and workers. Demand, supply, and market equilibrium. Impact of taxes, externalities, and market power on equilibrium. Three lecture hours a week for one semester, with additional hours to be arranged.

## ECO 304L (TCCN: ECON 2301). Introduction to Macroeconomics.

Analysis of the economy as a whole. Measurement of output, the price level, and employment. Basic theories of the determination of Gross domestic product, investment and growth, and inflation. Introduction to fiscal policy and monetary policy. Three lecture hours a week for one semester, with additional hours to be arranged. Prerequisite: Economics 304K with a grade of at least C-.

#### ECO 305. Introductory Topics in Economics.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### ECO 318Q. Supervised Research.

Individual instruction. May be repeated once for credit when the research topics vary. Prerequisite: Economics 304K and 304L with a grade of at least C- in each.

#### ECO 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Economics.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Economics. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

## **Upper-Division Courses**

#### ECO 420K. Microeconomic Theory.

Economic theory of the behavior of individuals, households, firms, and markets. Roles of relative prices and information, with a focus on constrained optimization. Four lecture hours a week for one semester. Economics 420K and 421K may not both be counted; required of students majoring in economics. Prerequisite: Economics 304K and 304L with a grade of at least C- in each; Economics 329 with a grade of at least C; and Mathematics 408C and 408D, or 408K and 408L, or 408N and 408S, or 408K and 408S, or 408C and 408L, or 408C and 408S, or 408N and 408L, with a grade of at least C- in each.

#### ECO 320L. Macroeconomic Theory.

Theories of the determination of output, employment, and the price level. Basic models of growth. Design of monetary and fiscal policies, and the mechanisms by which they affect the economy. Three lecture hours a week for one semester. Required of students majoring in economics. Prerequisite: Economics 420K or 421K with a grade of at least C-.

#### ECO 321. Public Economics.

Study of appropriate allocations of economic activity between government (federal, state, and local) and the private sector. The workings of social security, welfare, education, pollution control, deregulation, taxation; and proposals for reform. Three lecture hours a week for one semester. Prerequisite: Economics 420K or 421K with a grade of at least C-.

#### ECO 421K. Microeconomic Theory For Business.

Restricted to business majors. May not count toward a major in economics. Microeconomic analysis and applications for business majors. Preferences, including behavioral factors. Consumer demand, industry supply, and market equilibrium. Decision-making under uncertainty. Information problems, moral hazard, and adverse selection. Game theory and behavioral game theory. Applications include insurance markets, financial markets, contracts, and strategic behavior in business settings. Four lecture hours a week for one semester. Economics 420K and 421K may not both be counted. Prerequisite: Economics 304K and 304L with a grade of at least C- in each; Mathematics 408C and 408D, or 408K and 408L, or 408N and 408S, or 408K and 408S, or 408C and 408L, or 408C and 408S, or 408N and 408L, with a grade of at least C- in each.

#### ECO 322. Money and Banking.

Theories of financial intermediation and the role played by money. Financial policy and monetary policy in theory and practice. Three lecture hours a week for one semester. Only one of the following may be counted: Economics 322, Finance 354, 354H. Prerequisite: The following with a grade of at least C-: Economics 420K or 421K, and Economics 320L.

#### ECO 323T. Studies in Economic History.

Role of economic forces in shaping history. Subjects may focus on a country or region of the world, or take a global perspective on economic mechanisms driving change. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Economics 304K and 304L with a grade of at least C- in each.

**Topic 1: Economic History of the United States.** Economic history of the United States from colonial times to the present.

**Topic 2: World Economic History.** Economic history of the world from the Industrial Revolution to the present.

#### ECO 324. Introduction to Labor Economics.

Labor markets in modern economies. Role of institutions and policies in shaping labor market outcomes for individuals and businesses. Three lecture hours a week for one semester. Prerequisite: Economics 420K or 421K with a grade of at least C-.

#### ECO 325K. Health Economics.

Explores medical care as a commodity, demand for health and medical services, economic behavior of medical care providers, and the functioning of medical insurance markets. Government regulation and provision of health care and health insurance. Three lecture hours a week for one semester. Only one of the following may be counted: Economics 325K, 330T (Topic: Health Economics), 330T (Topic 1), 350K (Topic:

Health Economics), 350K (Topic 9). Prerequisite: Economics 420K or 421K with a grade of at least C-.

#### ECO 326L. Economics of Education.

Applications of economic principles and empirical methods to education, including the concept of human capital, economic returns to education, the determinants and measurement of teacher impact, the roles of school inputs and factors outside of school, and the market for higher education. Methodology for evaluating education policy. Three lecture hours a week for one semester. Economics 326L and 350K (Topic: Economics of Education) may not both be counted. Prerequisite: Economics 420K or 421K with a grade of at least C-.

#### ECO 327. Comparative Economic Systems.

Economic systems in theory and practice. Role of government and regulation. Three lecture hours a week for one semester. Prerequisite: Economics 304K and 304L with a grade of at least C- in each.

#### ECO 328. Industrial Organization.

Organization of industries and markets; competition, monopoly, and oligopoly. Introduction to antitrust policy, regulatory policy, and other alternatives. Three lecture hours a week for one semester. Prerequisite: Economics 420K with a grade of at least C-.

#### ECO 329. Economic Statistics.

Interpretation of economic data. Introduction to statistical models, estimation, and inference in economics. Three lecture hours a week for one semester. Only one of the following may be counted: Economics 329, Statistics 309, 309H. Prerequisite: Economics 304K and 304L with a grade of at least C- in each; and Mathematics 408C and 408D, or 408K and 408L, or 408N and 408S, or 408K and 408S, or 408C and 408L, or 408N and 408L, with a grade of at least C- in each.

#### ECO 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Economics.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Economics. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### ECO 330T. Topics in Economics.

Open to nonmajors. Topics cover aspects of economic theory, applications, and policy. Three lecture hours a week for one semester. Economics 330T and 350K may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Economics 304K with a grade of at least C-; additional prerequisites may vary with the topic.

Topic 1: Economics of Health. Only one of the following may be counted: Economics 325K, 330T (Topic: Health Economics), 330T (Topic 1), 350K (Topic: Health Economics), 350K (Topic 9). Topic 2: Introduction to Law and Economics. Only one of the following may be counted: Economics 330T (Topic 2), 349K (Topic: Law and Economics), 349K (Topic 1).

#### ECO 333K. Development Economics.

Same as Urban Studies 351 (Topic 4). Introduction to theories of economic development. Economic analysis of leading issues. Three lecture hours a week for one semester. Only one of the following may be counted: Economics 333K, Urban Studies 351 (Topic: Development Economics), 351 (Topic 4). Prerequisite: Economics 420K or 421K with a grade of at least C-.

#### ECO 334K. Urban Economics.

Same as Urban Studies 351 (Topic 2). Economic analysis of urban areas, emphasizing current problems, such as spatial concentration of poverty, lack of access to jobs and financial services, and transportation systems. Examines the role of policy in addressing these problems. Three lecture hours a week for one semester. Economics 334K and Urban Studies 351 (Topic 2) may not both be counted. Prerequisite: Economics 420K or 421K with a grade of at least C-.

#### ECO 334L. Regional Economics.

Same as Urban Studies 351 (Topic 3). Spatial aspects of economics, including concepts, theories, and policy applications. Three lecture hours a week for one semester. Economics 334L and Urban Studies 351 (Topic 3) may not both be counted. Prerequisite: Economics 420K or 421K with a grade of at least C-.

#### ECO 335K. Energy Economics.

Economic analysis of the markets for resources that supply energy, including coal, oil, natural gas, and shale gas, and the market for electricity. Principles of valuation and optimal dynamic allocation of energy resources. Financial contracts and risk management in energy markets. Regulation of energy markets. Three lecture hours a week for one semester. Economics 335K and 350K (Topic: Energy Economics) may not both be counted. Prerequisite: Economics 420K with a grade of at least C-.

#### ECO 339K. International Trade and Investment.

Theories explaining the location of production facilities and patterns in international trade. Implications of international trade for per capita income, growth, and inequality. Three lecture hours a week for one semester. Only one of the following may be counted: Economics 339K, European Studies 348 (Topic 2), International Business 320F, 350, 350S. Prerequisite: Economics 420K or 421K with a grade of at least C-.

#### ECO 339L. International Finance.

Exchange rates and foreign exchange markets; reasons for financial globalization; open-economy macroeconomics; exchange rate regimes (fixed and floating exchange rates, currency boards, and currency areas such as the euro zone); central bank accumulation of foreign exchange reserves; and sovereign debt crises and currency crashes. Reasons for different exchange rate arrangements and other policies are explored. Three lecture hours a week for one semester. Prerequisite: Economics 420K or 421K with a grade of at least C-, and 320L with a grade of at least C-.

#### ECO 341K, 441K. Introduction to Econometrics.

Parameter estimation and inference in regression models. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. Prerequisite: Economics 329 and 420K with a grade of at least C- in each.

#### ECO 348K. Advanced Topics in Econometrics.

Topics in econometric modeling and estimation. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Economics 420K and 341K with a grade of at least C- in each; additional prerequisites may vary with the topic.

**Topic 1: Advanced Econometrics.** Advanced econometric models for economic data and approaches to estimation and inference for those models. Three lecture hours a week for one semester. Economics 348K (Topic 1) and 350K (Topic 4) may not both be counted.

#### ECO 349K. Topics in Applied Economics.

Applications of economic theory, empirical methods, and policy analysis. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Economics 420K with a grade of at least C-; additional prerequisites may vary with the topic.

**Topic 1: Law and Economics.** Only one of the following may be counted: Economics 349K (Topic: Law and Economics), 349K (Topic 1), 330T (Topic 2).

#### ECO 350K. Advanced Topics in Economics.

Topics in economic theory, and the application of theory to empirical models. Three lecture hours a week for one semester. Economics 330T and 350K may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Economics 420K with a grade of at least C-; additional prerequisites may vary with the topic.

**Topic 5: Advanced Macroeconomics.** Advanced macroeconomic theory. Subjects may include dynamic general equilibrium models, real business cycle theory, and macroeconomic models with money and a financial intermediary sector. Economics 350K (Topic: Advanced Macroeconomics) and Economics 350K (Topic 5) may not both be counted. Additional prerequisite: Economics 320L with a grade of at least C-.

**Topic 6: Advanced Microeconomic Theory.** Advanced theory of individual behavior and organizations. Subjects may include decision-making under uncertainty, insurance, optimal contracts, and institutions. Additional prerequisite: Economics 329 with a grade of at least C-.

#### ECO 351K. Current Issues in Business Economics.

Economic analysis of government regulation and policy and business responses. Three lecture hours a week for one semester. Prerequisite: Economics 420K or 421K with a grade of at least C-.

#### ECO 351M. Managerial Economics.

Use of economic analysis and optimization as tools for improving managerial decision-making in business. Three lecture hours a week for one semester. Prerequisite: Economics 420K, and Economics 329 or Mathematics 362K, with a grade of at least C- in each.

#### ECO 352K. Business Strategy.

Economic analysis of business strategy, including introducing new products, vertically integrating, bundling goods, pricing, distribution, mergers, and product differentiation. Relevant aspects of antitrust law. Case studies of specific firms. Three lecture hours a week for one semester. Economics 350K (Topic: Business Strategy) and 352K may not both be counted. Prerequisite: Economics 420K with a grade of at least C-.

#### ECO 353K. Antitrust Law and Economics.

Economic analysis of antitrust law intended to deter firms from engaging in anti-competitive conduct that harms consumers, including mergers that impede competition, price-fixing, and anti-competitive practices by a dominant firm in an industry. Focus on various industries and select antitrust cases. Three lecture hours a week for one semester. Economics 350K (Topic: Antitrust Law and Economics) and Economics 353K may not both be counted. Prerequisite: Economics 420K with a grade of at least C-.

#### ECO 354K. Introductory Game Theory.

Introduction to the formal study of interdependent decision making. Applications of game theory include pricing and advertising strategies, labor-management bargaining, and tariff negotiations. Three lecture hours a week for one semester. Prerequisite: Economics 420K and 329 with a grade of at least C- in each.

## ECO 355. Development Problems and Policies in Latin America.

Same as Latin American Studies 355 (Topic 1) and Urban Studies 351 (Topic 1). Analysis of the economies of Latin America. Issues may include the structure and functioning of cities, rural-urban migration, the sectoral composition of GDP and employment, and determinants of growth. Prerequisite: Economics 304K and 304L with a grade of at least C- in each.

#### ECO 358Q. Supervised Research.

Individual instruction. May be repeated once for credit when the research topics vary. May not be counted toward the twenty-five semester hours in economics required for the major in economics. Prerequisite: Economics 420K and 329 with a grade of at least C- in each.

#### ECO 359M. Environmental and Natural Resource Economics.

Optimal use of exhaustible and renewable resources, including fuels, minerals, fisheries, forests, and water; resource scarcity and economic growth; valuation of nonmarketed environmental amenities; the economics of pollution control instruments, including taxes, permits, direct regulation, and negotiation; environmental quality and international trade; the economics of global climate change; pollution control policy in practice. Three lecture hours a week for one semester. Prerequisite: Economics 420K and 329 with a grade of at least C- in each.

#### ECO 361. Studies in Public Economics.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Economics 420K or 421K with a grade of at least C-, and Economics 341K or 441K with a grade of at least C-.

**Topic 1: Empirical Public Economics.** Economics 361 (Topic: Empirical Public Economics) and 361 (Topic 1) may not both be counted.

#### ECO 363C. Computational Economics.

Three lecture hours a week for one semester. Prerequisite: Economics 420K and 320L with a grade of at least C- in each.

#### ECO 367R. Monetary Economics.

Theories explaining the role of money in the economy. Three lecture hours a week for one semester. Prerequisite: Economics 420K or 421K with a grade of at least C-, and Economics 320L with a grade of at least C-.

#### ECO 368. Survey of the History of Economic Thought.

Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### ECO 369F. Financial Economics.

Economic analysis of the operation of financial markets, including arbitrage theory, asset pricing, and corporate finance. Three lecture hours a week for one semester. Prerequisite: Economics 420K and 329 with a grade of at least C- in each.

#### ECO 372M. Studies in Development Economics.

Analysis of specific aspects of the process of economic development, or common problems and interactions of countries in a developing region. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Economics 420K or 421K with a grade of at least C-. Additional prerequisites may vary with the topic.

#### ECO 376M. Studies in Labor Economics.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Economics 420K or 421K with a grade of at least C-; additional prerequisites may vary with the topic.

**Topic 1: Personnel Economics.** Applications of economic theory to decisions firms make about human resources. Labor demand, recruiting and hiring strategies, training and investment in employees's human capital, organizational design, characteristics of jobs and compensation schemes, and incentive effects of evaluation schemes. Economics 376M (Topic: Personnel Economics) and 376M (Topic 1) may not both be counted.

#### ECO 378H. Honors Tutorial Course I.

Supervised individual reading, research, and writing of a substantial paper on a special topic in the field of economics. Conference course. Prerequisite: Upper-division standing, admission to the Economics Honors Program, and consent of the honors adviser.

#### ECO 379C. Individual Conference Course.

Supervised individual study of selected problems in economics. Conference course. May not be counted toward the twenty-four semester hours in economics required for the major in economics. May be repeated for credit. Prerequisite: Upper-division standing and consent of instructor. Students should ordinarily have completed six semester hours of upper-division coursework in economics and coursework with supervising instructor.

#### ECO 379D. Internship in Economics.

Students conduct research while working in an appropriate government agency or private business. Ten hours of fieldwork a week for one semester. May be repeated once for credit when the internships vary. Offered on the pass/fail basis only. Prerequisite: Economics 420K with a grade of at least C-.

#### ECO 379H. Honors Tutorial Course II.

Supervised individual reading, research, and writing of a substantial paper on a special topic in the field of economics. Conference course. Prerequisite: Economics 378H.

## **Department of English**

Students are discouraged from taking more than six semester hours of coursework in English in a semester or summer term. No student may take more than nine semester hours of coursework in English in a semester.

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

## **Creative Writing: CRW**

#### **Lower-Division Courses**

#### CRW 315D. Playwriting I.

Same as Theatre and Dance 315. The study and practice of writing plays. Three lecture hours a week for one semester. Creative Writing 315D and Theater and Dance 315 may not both be counted.

#### CRW 315F. Introducton to Writing Fiction.

Intended for students with minimal prior experience in creative writing. Three lecture hours or one lecture hour and three workshop hours a week for one semester. Creative Writing 315F and English 315F may not both be counted. Prerequisite: English 303C (or 603A), Rhetoric and Writing 306, 306Q, or Tutorial Course 303C (or 603A).

#### CRW 315P. Introduction to Writing Poetry.

Intended for students with minimal prior experience in creative writing. Three lecture hours or one lecture hour and three workshop hours a week for one semester. Creative Writing 315P and English 315P may not both be counted. Prerequisite: English 303C (or 603A), Rhetoric and Writing 306, 306Q, or Tutorial Course 303C (or 603A).

### **Upper-Division Courses**

#### CRW 325. Topics in Creative Writing.

Detailed study and practice of the techniques of biography, creative nonfiction, or other special topics of creative writing; includes reading and analysis of contemporary models. Three lecture hours a week for one semester. Creative Writing 325 and English 325 may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: One of the following: Comparative Literature 315, English 303D (or 603B), 316L (or 316K), 316M (or 316K), 316N (or 316K), 316P (or 316K), or Tutorial Course 303D (or 603B).

**Topic 1: Writing Border Narratives.** Same as Mexican American Studies 374 (Topic 34). Examines the United States and Mexico border through the use of the personal essay in its various forms. Students write personal essays that focus on their relationships to the border. Only one of the following may be counted: Creative Writing 325 (Topic: Writing Border Narratives), 325 (Topic 1), English 325 (Topic: Writing Border Narratives), Mexican American Studies 374 (Topic: Writing Border Narratives), 374 (Topic 34). Additional prerequisite: Comparative Literature 315, English 303D (or 603B), 316L (or 316K), 316M (or 316K), 316N (or 316K), 316P (or 316K), or Tutorial Course 303D (or 603B).

#### CRW 325F. Fiction Writing.

Detailed study and practice of the techniques of fiction writing; includes reading and analysis of contemporary models. Three lecture hours a week for one semester. Only one of the following may be counted: Creative Writing 325F, English 325 (Topic 1: Creative Writing: Fiction), 325F. Prerequisite: One of the following: Comparative Literature 315, English 303D (or 603B), 316L (or 316K), 316M (or 316K), 316N (or 316K), 316P (or 316K), or Tutorial Course 303D (or 603B).

#### CRW 325M. Creative Writing.

Detailed study and practice of the techniques of fiction, poetry, and other genres of creative writing; includes reading and analysis of contemporary models. Three lecture hours or one lecture hour and three workshop hours a week for one semester. Only one of the following may be counted: Creative Writing 325M, English 315F, 315P. Prerequisite: One of the following: Comparative Literature 315, English 303D (or 603B), 316L (or 316K), 316M (or 316K), 316P (or 316K), or Tutorial Course 303D (or 603B).

#### CRW 325P. Poetry Writing.

Detailed study and practice of the techniques of poetry writing; includes reading and analysis of contemporary models. Three lecture hours a week for one semester. Only one of the following may be counted: Creative Writing 325P, English 325 (Topic 2: Creative Writing: Poetry), 325P. Prerequisite: One of the following: Comparative Literature 315, English 303D (or 603B), 316L (or 316K), 316M (or 316K), 316N (or 316K), 316P (or 316K), or Tutorial Course 303D (or 603B).

#### CRW 330. Literature for Writers.

Readings in fiction, poetry, drama, literary criticism, biography, and autobiography from the point of view of a creative writer. Three lecture hours a week for one semester. Prerequisite: One of the following: Creative Writing 325 (or English 325), 325F (or English 325F), 325M, 325P (or English 325P).

#### CRW 340D. Playwriting II.

Same as Theatre and Dance 325. Emphasis on the form and writing of the full-length play or equivalent. Three lecture hours a week for one semester. Creative Writing 340D and Theatre and Dance 325 may not both be counted. Prerequisite: Upper-division standing, Creative Writing 315D or Theatre and Dance 315, and consent of instructor.

#### CRW 340F. Short Story Workshop.

Practice in writing the short story, with study of contemporary models. The equivalent of three lecture hours a week for one semester. Creative Writing 340F and English 341 may not both be counted. Prerequisite: Creative Writing 325F (or English 325F), or 325M.

#### CRW 340P. Poetry Workshop.

Practice in writing poetry, with study of contemporary models. The equivalent of three lecture hours a week for one semester. Creative Writing 340P and English 341L may not both be counted. Prerequisite: Creative Writing 325M or 325P (or English 325P).

#### CRW 355D. Playwriting III.

Same as Theatre and Dance 355. Focus on experiments in revising dramatic text in order to create a common vocabulary around narrative structure. Revision often includes the creation of multiple new drafts, digging through past drafts for abandoned themes, lost focus, and new inspiration as well as exploring character, narrative, and/or language. Three lecture hours a week for one semester, with laboratory hours as required. Only one of the following may be counted: Creative Writing 355D, Theatre and Dance 355T (Topic: Playwriting III), 355. Prerequisite: Upper-division standing, Creative Writing 340D or Theatre and Dance 325, and consent of instructor.

#### CRW 355F. Advanced Fiction Workshop.

A third semester seminar-style workshop in fiction for experienced creative writers. The equivalent of three lecture hours a week for one semester. Only one of the following may be counted: Creative Writing 355F, 660, English 355K. Prerequisite: Creative Writing 340F (or English 341).

#### CRW 355P. Advanced Poetry Workshop.

A third semester seminar-style workshop in poetry for experienced creative writers. The equivalent of three lecture hours a week for one semester. Creative Writing 355P and English 355K may not both be counted. Prerequisite: Creative Writing 340P (or English 341L).

#### CRW 660. Intensive Creative Writing.

An accelerated seminar-style workshop for highly motivated students. Designed to be taken over two consecutive summer sessions; offered only during the summer semester. Three lecture-workshop hours a week for two semesters. Completion of this course is equivalent to completion of both Creative Writing 340F and 355F. Only one of the following may be counted: Creative Writing 340F and 355F; or 660; or English 355K. Prerequisite: For 660A, credit or registration for Creative Writing 325F or English 325F; for 660B, Creative Writing 660A.

#### CRW 370H. Honors Creative Writing Project.

For advanced students already proficient in writing who wish to work under supervision on specific and substantial projects. The equivalent of three lecture hours a week for one semester. Creative Writing 370H and English 367K may not both be counted. Prerequisite: Consent of the honors adviser.

#### CRW 375. Conference Course in Creative Writing.

Continue independent work in a creative project with a faculty advisor. The equivalent of three lecture hours a week for one semester. May be repeated for credit twice. May be repeated for credit. Prerequisite: Creative Writing 370H; approval of written application by supervising instructor and the director of undergraduate creative writing.

### English: E

### **Lower-Division Courses**

#### E 303C. Plan II World Literature Part I.

Restricted to Plan II students. Reading of masterpieces of world literature and intensive training in writing and in critical analysis of literature. Three lecture hours a week for one semester. Only one of the following may be counted: English 603A, 303C, Rhetoric and Writing 306, 306Q, Tutorial Course 603A, 303C.

#### E 303D. Plan II World Literature Part II.

Restricted to Plan II students. Reading of masterpieces of world literature and intensive training in writing and in critical analysis of literature. Three lecture hours a week for one semester. Only one of the following may be counted: Comparative Literature 315, English 303D, (603B), 316N, Tutorial Course 303D, (603B). Prerequisite: English 303C or Tutorial Course 303C.

#### E 310C. Literature and Community Engagement.

The equivalent of three lecture hours a week for one semester.

#### E 310F. Literature, Film, and Other Arts.

Survey of preeminent films of the twentieth century alongside a consideration of the literary works that most influenced them. Explores different modes of close reading and skills to critically analyze texts in a variety of literary and media formats. Focus on connections between different modes of modern expression and critical analysis. Three lecture hours a week for one semester. Some sections require an additional discussion hour a week. Prerequisite: One of the following: English 303C (or 603A), Rhetoric and Writing 306, 306Q, or Tutorial Course 303C (or 603A).

#### E 314J. Literature across the Curriculum.

Readings selected to highlight the connections between literary study and other fields of inquiry. Three lecture hours a week for one semester. May not be substituted for English 316L (or 316K), 316M (or 316K), 316N (or 316K), or 316P (or 316K). May be repeated for credit when the topics vary. Prerequisite: One of the following: English 303C (or 603A), Rhetoric and Writing 306, 306Q, or Tutorial Course 303C (or 603A).

**Topic 1: Literature and Film.** English 314J (Topic: Literature and Film) and 314J (Topic 1) may not both be counted.

**Topic 2: Literature and Religion.** Same as Religious Studies 306 (Topic 2). Only one of the following may be counted: English 314J (Topic: Literature and Religion), 314J (Topic 2), Religious Studies 306 (Topic: Literature and Religion), 306 (Topic 2).

**Topic 3: Literature and Theatre.** English 314J (Topic: Literature and Theatre) and 314J (Topic 3) may not both be counted.

#### E 314L. Introduction to Literary Studies.

Emphasis on skills and methods used in upper-division English courses; intensive practice in writing; and an introduction to field-specific research. Three lecture hours a week for one semester. May not be substituted for English 316L (or 316K), 316M (or 316K), 316N (or 316K), or 316P (or 316K). May be repeated for credit when the topics vary. Prerequisite: One of the following: English 303C (or 603A), Rhetoric and Writing 306, 306Q, or Tutorial Course 303C (or 603A).

Topic 3: Banned Books and Novel Ideas. Topic 4: Texts and Contexts. Topic 5: Reading Poetry. **Topic 9: Cult Classics.** An introduction to literary analysis focusing on works that have become cult classics.

**Topic 10: GoodReads.** An introduction to literary analysis, focusing on building a literary community.

#### E 314T. Advanced Placement Credit in English.

Used to record coursework credit based upon an appropriate Advanced Placement Literature and Composition examination score. The equivalent of three lecture hours a week for one semester. Offered on the pass/fail basis only.

# E 314V (TCCN: ENGL 2351). Introduction to Literature and Culture.

Readings focus on minority and ethnic American literatures in their cultural contexts with an emphasis on skills and methods. Intensive practice in writing and an introduction to field-specific research. Three lecture hours a week for one semester. May not be substituted for English 316L (or 316K), 316M (or 316K), 316N (or 316K), 316P (or 316K). May be repeated for credit when the topics vary. Prerequisite: One of the following: English 303C (or 603A), Rhetoric and Writing 306, 306Q, or Tutorial Course 303C (or 603A).

**Topic 1: African American Literature and Culture.** Same as African and African Diaspora Studies 317F (Topic 1: African American Literature and Culture). Explores texts, drawn from a variety of genres and periods, that indicate the range of African American experiences and how those experiences are influenced by issues such as class, ethnicity, gender, sexuality, and race. African and African Diaspora Studies 317F (Topic 1) and English 314V (Topic 1) may not both be counted.

**Topic 2: Asian American Literature and Culture**. Same as Asian American Studies 314. Explores how authors and artists over the course of the past century have imagined what it means to be Asian American. Covers a diverse range of Asian immigrant histories and the formation of Asian American identities according to ethnicity, gender, sexuality, class, and citizenship.

**Topic 3: Mexican American Literature and Culture.** Same as Mexican American Studies 314. Representative Chicano writers and genres, such as poetry, prose fiction, and theatre. Three lecture hours a week for one semester. English 314V (Topic 3) and Mexican American Studies 314 may not both be counted. May not be substituted for English 316L (or 316K), 316M (or 316K), 316N (or 316K), 316P (or 316K). Additional prerequisite: English 303C (or 603A), Rhetoric and Writing 306, 306Q, or Tutorial Course 303C (or 603A).

**Topic 4: Gay and Lesbian Literature and Culture**. Same as Women's and Gender Studies 301 (Topic 12: Gay and Lesbian Literature and Culture). American writing by gay, lesbian, bisexual, transgender, or queer authors and/or with gay, lesbian, bisexual, transgender, or queer themes. English 314V (Topic 4) and Women's and Gender Studies 301 (Topic 12) may not both be counted.

Topic 5: Native American Literature and Culture. Same as American Studies 315F. Studies Native American literature from different regions and cultures and considers this literary tradition in tribal national and United States national contexts. Only one of the following may be counted: American Studies 315 (Topic: Native American Literature and Culture), 315F, English 314V (Topic 5). Topic 6: Women, Gender, Literature, and Culture. Same as Women's and Gender Studies 301 (Topic 27). An introduction to literary analysis focusing on women's and gender studies. English 314V (Topic 6) and Women's and Gender Studies 301 (Topic 27) may not both be counted.

#### E 316L. British Literature.

Introduction to masterpieces of the British literary tradition, emphasizing historical, generic, and thematic connections. Three lecture hours a week for one semester. Some sections require an additional discussion hour a

week. Prerequisite: One of the following: English 303C (or 603A), Rhetoric and Writing 306, 306Q, or Tutorial Course 303C (or 603A).

#### E 316M. American Literature.

Introduction to masterpieces of the American literary tradition, emphasizing historical, generic, and thematic connections. Three lecture hours a week for one semester. Some sections require an additional discussion hour a week. Prerequisite: One of the following: English 303C (or 603A), Rhetoric and Writing 306, 306Q, or Tutorial Course 303C (or 603A).

#### E 316N. World Literature.

Introduction to masterpieces of world literature, emphasizing historical, generic, and thematic connections. Three lecture hours a week for one semester. Some sections require an additional discussion hour a week. Only one of the following may be counted: Comparative Literature 315, English 303D, (603B), 316N, Tutorial Course 303D, (603B). Prerequisite: One of the following: English 303C (or 603A), Rhetoric and Writing 306, 306Q, or Tutorial Course 303C (or 603A).

#### E 316P. Masterworks of Literature.

Introduction to masterpieces of literature, emphasizing historical, generic, and thematic connections. Three lecture hours a week for one semester. Some sections require an additional hour a week. Prerequisite: One of the following: English 303C (or 603A), Rhetoric and Writing 306, 306Q, or Tutorial Course 303C (or 603A).

#### E 318M. Introduction to the English Language.

Basic linguistic concepts; phonology, syntax, and vocabulary of English; historical, regional, and social variation; applications of linguistics in educational and social action. Three lecture hours a week for one semester. Prerequisite: One of the following: English 303C (or 603A), Rhetoric and Writing 306, 306Q, or Tutorial Course 303C (or 603A).

#### E 318Q. Supervised Research.

Student-initiated research conducted with instructor supervision. Three conference hours a week for one semester. May be taken twice for credit. May be repeated for credit. Prerequisite: Approval of written application by supervising instructor and the undergraduate faculty adviser.

#### E 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in English.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of English. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

# E 320L. Major Writers of the Restoration and Eighteenth Century.

A study of the principal writers: Dryden, Pope, Swift, Johnson, Boswell, Burns, and others. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 321. Shakespeare.

A selection from the works of William Shakespeare. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 321K. Introduction to Criticism.

Introduction to major terms, issues, and approaches in literary criticism, and their application to the reasoned discussion of poetry, fiction, and drama. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 321L. American English.

Same as Linguistics 321L. An overview of the historical development of English in the Americas. Attention to regional, social, and ethnic differences, and their implications for public education. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 321P. Shakespeare through Performance.

An intensive study of the plays of William Shakespeare, with emphasis on performance as a means of interpretation and an aid to comprehension. Three lecture hours a week for one semester, with additional laboratory hours as required. Prerequisite: Consent of instructor.

#### E 323L. English as a World Language.

Same as Linguistics 323L. An account of the spread of English around the world; national, social, and regional varieties. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 324. Topics in Language and Literature.

Three lecture hours a week for one semester. English 322 and 324 may not both be counted. May be repeated for credit when the topics vary. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

**Topic 6: Troubled Literary Marriages.** Examines how the personal lives of authors may be expressed in their works. Uses biographies, memoirs, letters, and the words of the authors, both in their creative and private lives, to explicate some of the major texts of the twentieth century. English 324 (Topic: Literary Marriages from Hell) and 324 (Topic 6) may not both be counted.

**Topic 8: The History of English as a Language of Law.** English 324 (Topic: History of English as a Language of Law) and 324 (Topic 8) may not both be counted.

#### E 324C. The Graphic Novel.

An analysis of the graphic novel. Representative authors include Lynd Ward, Jaime and Gilbert Hernandez, Art Spiegelman, Alan Moore, Neil Gaiman, Chris Ware, Marjane Satrapi, and Alison Bechdel. Three lecture hours a week for one semester. English 324 (Topic: Themes in the Graphic Novel) and 324C may not both be counted. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 326K. The Literature of the Middle Ages in Translation.

Romances, chronicles, legends, tales, and plays by English, Celtic, and Continental writers. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 326L. Survey of Middle English Language and Literature.

Language and literature from 1100 to 1500. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 327. The British Novel in the Eighteenth Century.

Representative novels and novelists from 1700 to 1832, including typical works of Defoe, Richardson, Fielding, Sterne, Austen, and Scott. Three

lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 328. The British Novel in the Nineteenth Century.

Representative works by such writers as Dickens, Thackeray, the Brontes, Eliot, Meredith, and Hardy. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 329R. The Romantic Period.

The prose and poetry of writers such as Blake, Wordsworth, Coleridge, Byron, Keats, Shelley, and others. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in English.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of English. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

# E 336E. British Literature: Beginnings through the Renaissance.

A survey of major writers, poetry, and prose. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 337. American Literature: From the Beginnings to 1865.

A survey of major writers, poetry, and prose. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

# E 337E. British Literature: The Restoration through the Romantic Era.

A survey of major writers, poetry, and prose. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 338. American Literature: From 1865 to the Present.

A survey of major writers, poetry, and prose. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

# E 338E. British Literature: The Victorian Era through World War II.

A survey of major writers, poetry, and prose. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 340. The American Novel before 1920.

Representative novels by such writers as Brown, Melville, Fern, Hawthorne, Twain, Crane, James, Wharton, and Dreiser. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 342. Life and Literature of the Southwest.

Verse, fiction, travels, and memoirs, to acquaint students with the literature reflecting the social inheritance of Texas and the neighboring territory. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

**Topic 1: Life and Literature of the Southwest--Mexican American.** Same as Mexican American Studies 374 (Topic 2: Life and Literature of the Southwest--Mexican American).

#### E 342S. Southern Literature.

Introduction to and survey of the literature of the United States South. Explores methods of literary and cultural interpretation with focus on critical thinking, reading, and writing skills. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 342T. Life and Literature of Texas.

Examines how Texas authors describe and explore the diversity and complexity of a state often seen in terms of myth and caricature. Works include literature from across the state by writers such as Katherine Anne Porter, Larry McMurtry, Cormac McCarthy, among others. Three lecture hours a week for one semester. Only one of the following may be counted: English 342 (Topic: Life and Literature of Texas), 342 (Topic 2), 342T. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 343L. Modernism and Literature.

Strands of thought and literature that form the network of modernist writing. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 343P. Postmodern Literature.

Survey of postmodern writing. As a period, the postmodern extends roughly from the era after World War II, and follows the modern, a term often applied to literature produced since the start of World War I. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 344C. Young Adult: Fiction and Film.

See the works as embedded in specific historical, artistic, and cultural contexts that must be engaged in order to understand their expressed values and concerns about youth culture, specifically and comparatively. Discussions and analyses focus on aesthetics, form, and genre, framed by critical approaches and reading strategies rooted in film, genre, feminist, cultural, ethnic, and gender studies. Three lecture hours a week for one semester. Only one of the following may be counted: English 344C, 344L (Topic: Young Adult: Fiction and Film), 344L (Topic 7), Mexican American Studies 374 (Topic: Young Adult: Fiction and Film). Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 344L. Contemporary Literature and Other Media.

A study of the relationship between literary forms and other media (film, television, music, the visual arts). Three lecture hours a week for one semester; additional hours may be required for some topics. May be repeated for credit when the topics vary. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### Topic 4: Australian Literature and Film.

**Topic 5: Representations of Childhood and Adolescence in Literature and Film.** Only one of the following may be counted: English 344L (Topic: Representations of Childhood and Adolescence in Literature and Film), 344L (Topic 5), Liberal Arts Honors 350 (Topic: Representations of Childhood and Adolescence in Literature and Film).

**Topic 6: Writer-Directors: European Literary Cinema.** Examines the aesthetic and political foundations of European cinema, including the Russian Constructivists, the French Nouvelle Vague, and the Dogme95

Collective. Subjects include the influences of literary and visual arts movements, such as surrealism, neo-realism, and the Nouveau Roman. English 344L (Topic: Writers and Directors: Literary Cinema) and 344L (Topic 6) may not both be counted.

Topic 8: Gender, Class, and Ethnicity in American Literature and Film. Three lecture hours a week for one semester. Only one of the following may be counted: English 344L (Topic: Gender, Class, and Ethnicity in American Literature and Film), 344L (Topic 8), Mexican American Studies 374 (Topic: Gender, Class, and Ethnicity in American Literature and Film), Social Work 360K (Topic: Gender, Class, and Ethnicity in American Literature and Film), Women's and Gender Studies 340 (Topic: Gender, Class, and Ethnicity in American Literature and Film).

#### E 348. The Short Story.

Extensive readings and analyses of stories by major modern writers such as Faulkner, Hemingway, Joyce, Chekhov, and Kafka, as well as contemporary writers. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 349S. Topics on Major Authors.

Intensive study of the works of a single major author or two major authors. Three lecture hours a week for one semester. Only one of the following may be counted unless the topics vary: English 322, 349S, 370W, 376M. May be repeated for credit when the topics vary. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### Topic 1: Jane Austen.

**Topic 2: The Brontes.** English 349S (Topic 2) and 370W (Topic: Brontes: Self and Society) may not both be counted.

### Topic 3: James and Wharton.

#### Topic 4: James Joyce.

**Topic 5: Toni Morrison.** Same as African and African Diaspora Studies 372E (Topic 1) and Women's and Gender Studies 345 (Topic 46). An examination of select novels by the Nobel Laureate and Pulitzer Prizewinning novelist focuses on the positional uniqueness that womanism shares with a predominant feminism, which surfaces in historicized familial relationships. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Toni Morrison), 372E (Topic 1), English 349S (Topic 5), Women's and Gender Studies 340 (Topic: Toni Morrison), 345 (Topic 46). Additional prerequisite: Nine semester hours of coursework in English or rhetoric and writing. **Topic 6: Walt Whitman.** 

#### Topic 7: Oscar Wilde.

**Topic 8: Virginia Woolf.** Same as Women's and Gender Studies 345 (Topic 40). Examines critical and fictional works of Virginia Woolf and the author's continuing legacy and influence. Explores the value and limitations of high modernism; English literary heritage and tradition; feminism; creative and critical definitions of gender and sexuality; intellectual activism, including Woolf's critiques of patriarchy, war, and fascism; and Woolf and imperialism and colonialism. English 349S (Topic 8) and Women's and Gender Studies 345 (Topic 40) may not both be counted. Additional prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### Topic 9: William Faulkner.

**Topic 10: Graham Greene.** English 349S (Topic: Graham Greene) and 349S (Topic 10) may not both be counted.

Topic 11: Nathaniel Hawthorne. English 349S (Topic: Nathaniel Hawthorne) and 349S (Topic 11) may not both be counted. Topic 12: Alice Munro. English 349S (Topic: Alice Munro) and 349S (Topic 12) may not both be counted.

**Topic 13: Charles Dickens.** English 349S (Topic: Charles Dickens) and 349S (Topic 13) may not both be counted.

**Topic 14: David Foster Wallace.** Only one of the following may be counted: English 349S (Topic: David Foster Wallace), 349S (Topic 14), Liberal Arts Honors 350 (Topic: David Foster Wallace).

**Topic 15: Edgar Allan Poe.** English 349S (Topic: Edgar Allan Poe) and 349S (Topic 15) may not both be counted.

**Topic 16: Ernest Hemingway.** English 349S (Topic: Ernest Hemingway) and 349S (Topic 16) may not both be counted.

**Topic 17: George Eliot.** English 349S (Topic: George Eliot) and 349S (Topic 17) may not both be counted.

Topic 18: Chaucer and Shakespeare. English 349S (Topic: Chaucer and Shakespeare) and 349S (Topic 18) may not both be counted. Topic 19: Shakespeare and Marlowe.

# E 350E. Topics in Language and Literature: Beginnings to 1630.

Three lecture hours a week for one semester. English 350E and 364D may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### Topic 1: Classical and Scriptural Backgrounds of Literature.

**Topic 2: Saracens in Medieval Literature.** Same as Middle Eastern Studies 342 (Topic 18). Muslims, Arabs, Turks, Persians, Berbers, and Moors were often identified in literature and historical texts under the invented group name Saracens. Course explores who, and what, a Saracen is. Includes selected readings of literature, historical documents, and critical scholarship on Saracens in European medieval romances and epics, crusade literature, travel narratives, maps, and polemical treatises. For critical contrast, readings also include Islamic texts on, or by some of the most famous (or infamous) Saracens known to medieval Europe. English 350E (Topic 2) and Middle Eastern Studies 342 (Topic 18) may not both be counted. Additional prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

**Topic 3: Literature and the Visual Arts.** Examines the relationship between words and images across a broad historical sweep. Only one of the following may be counted: English 320M (Topic: Literature and the Visual Arts), 350E (Topic: Literature and the Visual Arts), 350E (Topic 3).

#### E 350M. Topics in Language and Literature: 1630 to 1830.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

**Topic 1: Eighteenth-Century Women Writers.** Same as Women's and Gender Studies 345 (Topic 7). Women writers in the early eighteenth-century canon. Argues for a historical perspective that demonstrates the centrality of early eighteenth-century women writers to the western canon. English 350M (Topic 1) and Women's and Gender Studies 345 (Topic 7) may not both be counted. Additional prerequisite: For English majors, nine semester hours of coursework in English or rhetoric and writing; for others, upper-division standing.

#### E 350R. Topics in Language and Literature: 1830 to 1940.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

Topic 1: Law, Society, and the Novel in Nineteenth-Century Britain. Topic 2: Animal Humanities. Explores the intersection of literature with animal studies. Only one of the following may be counted: English 350R (Topic: Animal Humanities), 350R (Topic 2), 379N (Topic: Animal Humanities).

Topic 3: Literature, Cultural Memory, and the American Civil War. Examines the American Civil War not in terms of its military or political history but in relation to the ways literary and cultural texts have remembered and rewritten it. Only one of the following may be counted: English 350R (Topic 3), 376L (Topic: Literature, Cultural Memory, and the American Civil War), Liberal Arts Honors 350 (Topic: Literature, Cultural Memory, and the American Civil War). **Topic 4: The Paperback.** Introduction to basic bibliography terminology and book history by tracking the evolution of the modern paperback, from 1850 to now, by means of author case studies. Only one of the following may be counted: English 350R (Topic: The Paperback), 350R (Topic 4), Liberal Arts Honors 350 (Topic: The Paperback).

#### E 352K. Arthurian Literature and Film.

A survey of the major Arthurian narratives from their origins in the Middle Ages to the present in various textual (prose, poetry, drama) and visual (illustration, film, graphic) forms. Three lecture hours a week for one semester. English 350E (Topic: Arthurian Literature and Film) and 352K may not both be counted. Prerequisite: Nine semester hours of coursework in English or Rhetoric and Writing.

#### E 352V. Viking Literature.

A survey of early Norse and Anglo-Scandinavian prose and verse–saga; chronicle, heroic epic, and mythological (eddic and skaldic) verse–with attention to the image of the viking in contemporary popular culture. Three lecture hours a week for one semester. English 350E (Topic: Viking Literature) and 352V may not both be counted. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 356. The European Novel.

Same as European Studies 347 (Topic 7: The European Novel). Selected masterpieces of continental fiction in English translation; representative novelists of the nineteenth and twentieth centuries. Three lecture hours a week for one semester. English 356 and European Studies 347 (Topic 7) may not both be counted. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 358J. The Bible as Literature.

Same as Religious Studies 355. In-depth literary study of the Bible, with emphasis on the formal features of narrative, hymn, prophecy, apocalypse, gospel, and epistle. Three lecture hours a week for one semester. English 358J and Religious Studies 355 may not both be counted. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 358K. The Bible in British and American Literature.

Same as Religious Studies 355K. The reading of biblical masterpieces as literature; consideration of different versions of the Bible and their influence on British and American literature. Three lecture hours a week for one semester. English 358K and Religious Studies 355K may not both be counted. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 358Q. Supervised Research.

Student-initiated research conducted with instructor supervision. Three conference hours a week for one semester. May be taken twice for credit. May be repeated for credit. Prerequisite: Completion of at least sixty semester hours of coursework, including at least six semester hours of upper-division coursework in English or rhetoric and writing; a University grade point average of at least 3.00; and approval of written application by supervising instructor and the undergraduate faculty adviser.

#### E 358R. Research Apprenticeship.

Restricted to students in the English Honors Program. Supervised research on a faculty-initiated project. Individual instruction. Prerequisite: Consent of instructor.

#### E 359. British Drama from 1660 to 1900.

Representative drama texts from the Restoration to the beginnings of modern theatre, including Behn, Sheridan, Wilde, and Shaw. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 360K. English Grammar.

The study of traditional and transformational grammar. Attention to social differences in language relevant to the teaching of English. Three lecture hours a week for one semester. English 360K and Linguistics 360K may not both be counted. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 360L. English as a World Literature.

English literature from around the world, including Canada, Australasia, Africa, and India. Three lecture hours a week for one semester. English 360L and 360S may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

**Topic 2: Caribbean Literature.** Same as African and African Diaspora Studies 374F (Topic 7) and Comparative Literature 323 (Topic 6). Only one of the following may be counted: African and African Diaspora Studies 374F (Topic 7), Comparative Literature 323 (Topic 6), English 360L (Topic 2). Additional prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

**Topic 3: Global Indian Literature.** Same as Asian American Studies 320 (Topic 5) and Asian Studies 361 (Topic 47). Only one of the following may be counted: Asian American Studies 320 (Topic: Global Indian Literature), 320 (Topic 5), Asian Studies 361 (Topic: Global Indian Literature), 361 (Topic 47), English 360L (Topic: Global Indian Literature), 360L (Topic 3). Additional prerequisite: Nine semester hours of coursework in English or Rhetoric and Writing.

# E 360R. Literary Studies for High School Teachers of English.

Intended for students seeking a secondary school teaching certificate. The principles and practices of teaching literature in secondary schools. Three lecture hours a week for one semester. English 360R and Rhetoric and Writing 379C (Topic: Literary Studies for High School Teachers of English) may not both be counted. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 360S. Literature and Global Society.

Contexts for the study of literature and for the study of pressing issues through literature in an age of globalization. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### Topic 1: Literature and Social Justice.

**Topic 2: Literature of AIDS in Africa.** Same as African and African Diaspora Studies 372G (Topic 1). Examines the emerging cultural representations of AIDS in sub-Saharan Africa through journalistic, social science, and historical accounts. Examines the difficulty of representing the various aspects of a public-health crisis. Only one of the following may be counted: African and African Diaspora Studies 372G (Topic 1), 374C (Topic: Literature of African AIDS), English 360S (Topic 2). Additional prerequisite: For English majors, nine semester

hours of coursework in English or rhetoric and writing; for others, upper-division standing.

**Topic 3: Envisioning Muslims: The Middle Ages and Today.** Same as Middle Eastern Studies 342 (Topic 17). Covers the representation of Muslims in the dominant cultural media of the European Middle Ages and in the contemporary world of the twentieth and twentyfirst centuries. Modern cultural media includes film and digital visual media. Readings are selected to show how Europeans envisioned Muslims, and how Muslims envisioned themselves. Only one of the following may be counted: English 360S (Topic 3), Islamic Studies 372 (Topic: Envisioning Muslims), Middle Eastern Studies 342 (Topic 17). Additional prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

**Topic 4: Africa and the Victorians.** Examines the literary history of the "scramble for Africa" and its historical and documentary record of "civilization, Christianity, and commerce." Selection of materials will range from classic nineteenth-century novels (Conrad, Kipling, Rider Haggard) to travel accounts of adventurers and missionaries (Livingstone, Stanley, Rhodes), with particular reference to crises of empire, such as the Boer War or the Congo reform movement, and their implications for twenty-first-century current events. English 360S (Topic: Africa and the Victorians) and 360S (Topic 4) may not both be counted.

**Topic 5: Race in the Middle Ages.** Explores the changing patterns, meanings, and uses of racializing discourses in medieval Europe from the twelfth through the fifteenth centuries. Considers the relationships among race, gender, sexuality, and heresy in the Middle Ages, and the role of race in the formation of medieval-style nations, empires, and Christendom.

**Topic 6: Matters of Taste: Food Writing, Culture, and Environment.** Traces the origins of food writing and explores the ways this genre engages with contemporary issues of cultural definition, political action, and global sustainability while activating various definitions of taste and judgment ascribed to aesthetic and philosophical pursuits. **Topic 7: Archival Fictions.** Explores the value of contemporary fiction, broadly understood to include multi-genre writing, that draws on archival materials as a means of documenting and producing counterhistories. Literary texts address global and transnational histories of colonialism, slavery, diaspora, and gender and sexual politics, as well as more specific events such as the Holocaust, 9/11, and environmental change. Only one of the following may be counted: English 360S (Topic: Historical Fictions), 360S (Topic 7), Liberal Arts Honors 350 (Topic: Historical Fictions), 350 (Topic 20).

#### E 361K. British Drama to 1642.

A survey of early British drama, usually including works by Marlowe, Kyd, Shakespeare, Jonson, Webster, and Middleton. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 362L. The Contemporary British Novel.

Representative novels, including those of Joyce, Lawrence, and Woolf. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 363. Milton.

All the poetry of Milton, with particular attention to Comus, Samson Agonistes, and Paradise Lost. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 363K. Classic to Romantic.

The theory and practice of Classicism in literature and other arts; the rise of the Romanticists in the eighteenth century. Three lecture hours a week

for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

# E 364D. Topics in Diverse Perspectives on Language and Culture.

Studies in English with particular attention to linguistic and cultural diversity. Three lecture hours a week for one semester. English 350E and 364D may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

**Topic 1: Gypsy Language and Culture.** Same as Linguistics 322. Linguistic introduction to Romani; relationship to languages of India; history from 280 BC; modern dialects and international standard language; history and culture as reflected in the language. Three lecture hours a week for one semester. Only one of the following may be counted: Asian Studies 372 (Topic 13), English 350E (Topic: Gypsy Language and Culture), 364D (Topic 1), Linguistics 322, Russian, East European, and Eurasian Studies 325 (Topic 1). Additional prerequisite: For English majors, nine semester hours of coursework in English or rhetoric and writing; for others, upper-division standing.

#### E 364M. History of the English Language.

Same as Linguistics 364M. Development of sounds, forms, and vocabulary of the English language from its origins to the present. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 364P. Old English.

An introduction to Old English with sufficient grammar for a reading knowledge of Old English texts. A course in language, not in linguistics. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 364S. Language and Gender.

Same as Women's and Gender Studies 345 (Topic 17: Language and Gender). Linguistic, social, and political dimensions of gender-related speech differences. Three lecture hours a week for one semester. Only one of the following may be counted: English 346S, Linguistics 373 (Topic: Language and the Sexes), Women's and Gender Studies 345 (Topic 17). Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 364T. The English Language and Its Social Context.

English language history, theory, and research for students of literature and rhetoric. May include such topics as language diversity and variation, linguistic attitudes, language variety and education, and language and public policy. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 366D. Dante.

Same as European Studies 347 (Topic 23) and Italian Civilization 348. Three lecture hours a week for one semester. Only one of the following may be counted: English 322 (Topic 23), 366D, European Studies 347 (Topic: Dante), 347 (Topic 23), Italian Civilization 348, 349 (Topic 2). Prerequisite: Upper-division standing.

#### E 367C. Conference Course in Literature and Language.

For students who wish to work under supervision on specific projects in literature or language. Three conference hours a week for one semester. May be taken twice for credit. May be repeated for credit. Prerequisite: Completion of at least sixty semester hours of coursework, including at least six semester hours of upper-division coursework in English or rhetoric and writing; a University grade point average of at least 3.00; and approval of written application by supervising instructor and the undergraduate faculty adviser.

#### E 367E. English Internship.

Research and staff experience working in an appropriate agency or private business. At least twelve hours of fieldwork a week for one semester. May not be counted toward the English major or minor. Offered on the pass/fail basis only. Prerequisite: Completion of at least sixty semester hours of coursework, including at least six semester hours of upper-division coursework in English or rhetoric and writing; a University grade point average of at least 3.00; and approval of written application by the undergraduate faculty adviser.

#### E 368H. Honors Tutorial Course I.

Research into and development of a thesis topic and proposal. The equivalent of three lecture hours a week for one semester. Only one of the following may be counted: English 368H and 369H; or 679H. Prerequisite: Enrollment in or completion of at least one honors section of an English course, admission to the English Honors Program, and consent of the honors adviser.

#### E 369. Twentieth-Century Drama.

Ibsen and other major dramatists; tradition and innovation in the substance and form of selected modern plays. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 369H. Honors Tutorial Course II.

Writing and defense of an Honors thesis. Individual instruction. The equivalent of three lecture hours a week for one semester. Only one of the following may be counted: English 368H and 369H; or 679H. Prerequisite: English 368H with a grade of at least B+.

#### E 370. Victorian Prose: Essays and Ideas.

The prose writer as artist and sage in the cultural, political, religious, and scientific controversies that influence the modern tradition. Representative writers: Carlyle, Mill, Newman, Arnold, Darwin. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 470H. Honors Tutorial Course for Teachers.

Research into and development of a thesis topic and proposal followed by the writing and defense of a thesis. The equivalent of four lecture hours a week for one semester. Prerequisite: Credit or registration for a minimum of one honors section of an English course, admission to the English Honors Program, admission to UTeach-Liberal Arts, and consent of the honors adviser.

#### E 370W. Studies in Literature, Culture, and Gender.

Gender as a category of literary and cultural analysis. Texts may include literature, film, popular culture, and other forms. Three lecture hours a week for one semester. Only one of the following may be counted unless the topics vary: English 349S, 370W, 376M. May be repeated for credit when the topics vary. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

**Topic 2: Contemporary Women Authors.** Same as African and African Diaspora Studies 374F (Topic 4: Contemporary Women Authors) and Women's and Gender Studies 345 (Topic 15: Contemporary Women Authors).

**Topic 8: Gay and Lesbian Literature and Culture.** Same as Women's and Gender Studies 345 (Topic 30: Gay and Lesbian Literature and Culture).

**Topic 9: Gender, Sexuality, and Migration.** Same as Women's and Gender Studies 345 (Topic 39: Gender, Sexuality, and Migration). Only

one of the following may be counted: Asian American Studies 320 (Topic: Gender, Sexuality, and Migration), English 370W (Topic 9), 370W (Topic: Cultures of Immigration and Dislocation), Women's and Gender Studies 345 (Topic 39).

**Topic 11: Women's Autobiographical Writing**. Same as Women's and Gender Studies 345 (Topic 48). Examines the autobiographical impulse in women's writing by exploring the concept of the individualistic self versus the sense of self as a part of community and duty, and the way in which that communal self can both partake of humankind and participate in self-actualization. Only one of the following may be counted: English 370W (Topic: Women's Autobiographical Writing), 370W (Topic 11), Women's and Gender Studies 345 (Topic: Women's Autobiographical Writing), 345 (Topic 48). Additional prerequisite: For English majors, nine semester hours of coursework in English or rhetoric and writing; for others, upperdivision standing.

**Topic 12: American Literary Masculinities.** Same as Women's and Gender Studies 345 (Topic 52). Explores constructions of masculinity in American literature from a generally, but not exclusively, feminist perspective. Subjects include what masculinity has meant at different times in United States history, and how it has varied in meaning and significance according to broad categories of identity such as social class, race, region, and queerness. Only one of the following may be counted: English 370W (Topic: American Literary Masculinities), 370W (Topic 12), Women's and Gender Studies 345 (Topic: American Literary Masculinities), 345 (Topic 52). Additional prerequisite: For English majors, nine semester hours of coursework in English or rhetoric and writing; for others, upper-division standing.

#### E 371K. Modern and Contemporary Poetry.

Poets that may be studied include Eliot, Auden, Stevens, Thomas, Bishop, Rich, and Merwin. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 372L. The American Renaissance.

Selected writers of the pre-Civil War Romantic movement, including Emerson, Douglass, Fuller, Hawthorne, Melville, Thoreau, Whitman, and others. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 372M. American Realism.

Selected writers of the post-Civil War realistic movement: Howells, Twain, James, Jewett, Freeman, Crane, and others. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 374G. Beowulf.

An extended reading of the work in its cultural and literary context. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 374K. Elizabethan Poetry and Prose.

Renaissance thought and culture as revealed in the lyric and narrative poetry and in the prose masterpieces. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

# E 374L. The Earlier Seventeenth Century: Donne, Jonson, and Their Contemporaries.

Poetry and prose, 1600 to 1660: the metaphysical and other leading traditions in poetry; the early poems of Milton; the essay, the character, and other prose forms. Three lecture hours a week for one semester.

Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 375K. Satire.

Theory of satire, with readings in the works of such representative figures as Chaucer, Dryden, Pope, Byron, Mark Twain, Will Rogers, Dorothy Parker, James Thurber, and Ishmael Reed. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 375L. Victorian Literature.

Poetry and prose, 1832 to 1901; parallel reading in the novel and drama, and attention to the social and intellectual background of the period. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 376. Chaucer.

Introduction to Chaucer's narrative and poetic art, as shown in a selection from the dream poems, Troilus and Criseyde, and the Canterbury Tales. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 376M. Studies in Ethnic American Literature.

Three lecture hours a week for one semester. Only one of the following may be counted unless the topics vary: English 349S, 370W, 376M. May be repeated for credit when the topics vary. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

**Topic 3: Writing Slavery.** Same as African and African Diaspora Studies 374F (Topic 6) and Women's and Gender Studies 340 (Topic 31). Explores the controversial rewriting of slavery in a presentist context by contemporary authors. Addresses challenges that archival limitations and revisionist writings about slavery pose for academic disciplines, literary instruction, and/or pedagogy. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Writing Slavery), 374F (Topic 6), English 376M (Topic: Writing Slavery), 376M (Topic 3), Women's and Gender 340 (Topic: Writing Slavery), 340 (Topic 31). Additional prerequisite: For English majors, nine semester hours of coursework in English or rhetoric and writing; for others, upper-division standing.

#### Topic 4: Mexican American Modernism.

**Topic 5: Contemporary Asian American Novels.** Same as Asian American Studies 320 (Topic 3). Asian American Studies 320 (Topic 3) and English 376M (Topic 5) may not both be counted.

#### Topic 6: Contemporary Native American Literature.

**Topic 7: Contemporary African American Women's Fiction.** Same as African and African Diaspora Studies 372E (Topic 15) and Women's and Gender Studies 340 (Topic 29). Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Contemporary African American Women's Fiction), 372E (Topic 15), English 376M (Topic: Contemporary African American Women's Fiction), 376M (Topic 7), Women's and Gender Studies 340 (Topic: Contemporary African American Women's Fiction), 340 (Topic 29). Additional prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

**Topic 8: Black Queer Literature and Film.** Same as African and African Diaspora Studies 372E (Topic 13) and Women's and Gender Studies 340 (Topic 47). Analyzes written works, films, and videos by and about lesbians, bisexual, transgender, and gay black people, with an emphasis on understanding the historical and theoretical construction of sexual and gender identities and sexual/cultural practices in black communities. Only one of the following may be counted: African and African Diaspora Studies 372E (Topic: Black Queer Literature and Film), 372E (Topic 13), 374F (Topic: Black Queer Literature and Film),

English 376M (Topic: Black Queer Literature and Film), 376M (Topic 8), Women's and Gender Studies 340 (Topic: Black Queer Literature and Film), 340 (Topic 47). Additional prerequisite: For English majors, nine semester hours of coursework in English or rhetoric and writing; for others, upper-division standing.

# E 376R. African American Literature through the Harlem Renaissance.

Same as African and African Diaspora Studies 372E (Topic 4). A survey of African American writing, including autobiography, poetry, fiction, and drama. Authors may include Douglass, Jacobs, Frances E. W. Harper, Chestnutt, Du Bois, Hurston, and Hughes. Three lecture hours a week for one semester. African and African Diaspora Studies 372E (Topic 4) and English 376R may not both be counted. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

# E 376S. African American Literature since the Harlem Renaissance.

Same as African and African Diaspora Studies 372E (Topic 5: African American Literature since the Harlem Renaissance). The development of African American poetry, drama, fiction, and nonfiction since the Harlem Renaissance. Authors may include Wright, Ellison, Baldwin, Malcolm X, Baraka, Morrison, Shange, and Charles Johnson. Three lecture hours a week for one semester. African and African Diaspora Studies 372E (Topic 5) and English 376S may not both be counted. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 377K. The American Novel after 1920.

Representative works by such writers as Faulkner, Hemingway, Fitzgerald, Larsen, Hurston, Morrison, Bellow, Erdrich, and Tan. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 377M. The American Novel after 1960.

Examines American novels and short stories from the 1960s to the present. Considers the aesthetic and narrative innovations of the period in light of social, historical, technological, and political developments. Representative authors include Pynchon, Roth, Morrison, DeLillo, Silko, Robinson, Egan, and Diaz. Three lecture hours a week for one semester. English 324 (Topic: American Novels after 1960) and English 377M may not both be counted. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 678S. Shakespeare at Winedale.

Study and readings of selected works and criticism, culminating in public performance of the plays. For English 678SB, students are required to be in residence at Winedale near Round Top, Texas. For 678SA, the equivalent of five lecture hours a week for one semester; for 678SB, fifteen to eighteen hours of work a day, including weekends. Offered in the summer session only. Prerequisite: For 678SA, consent of instructor; for 678SB, English 678SA and consent of instructor.

#### E 379. American Literature and Thought: 1600-1840.

Early American literature as an embodiment of American thought and experience. Such topics as European ideas in the New World; the political ideas of Hamilton, Jefferson, and Jackson; nationalism; industrialism. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 379K. American Literature and Thought: 1840-1920.

Such topics as transcendentalism, manifest destiny, Utopian thought, and the impact of the theory of organic evolution. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 379L. Contemporary Drama.

Major playwrights since 1950, such as Williams, Shepard, Beckett, Stoppard, Churchill, Fugard, and Pinter. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 379P. Drama in Performance.

Intensive study of drama through active performance as a means of interpretation and an aid to comprehension. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### E 379R. Undergraduate Seminar.

Intensive study of selected topics in English. Three lecture hours a week for one semester. Some topics require additional time for film screenings. May be repeated for credit when the topics vary. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### Topic 1: Complicated Reading: The Adaptation of Film.

**Topic 2: Fiction and Medievalism.** By examining selected works of fiction, as well as some literary criticism, poetry, visual arts, and film, students will explore how the category of 'the medieval' has been constructed, and its imagery activated, in postmedieval settings from the eighteenth century onwards. English 379R (Topic: Fiction and Medievalism) and 379R (Topic 2) may not both be counted. **Topic 3: The Kennedy Assassination: Fact, Fiction, and Fantasy.** Subjects include establishing a factual basis regarding different aspects of the Kennedy assassination; fiction inspired by the assassination; and examining conspiracy theories of the assassination. Only one of the following may be counted: English 379R (Topic: The Kennedy Assassination: Fact, Fiction and Fantasy), 379R (Topic 3), Liberal Arts Honors 350 (Topic: The Kennedy Assassination: Fact, Fiction and Fantasy).

**Topic 4: Producing American Literature.** English 379R (Topic: Producing American Literature) and 379R (Topic 4) may not both be counted.

**Topic 6: Popular Music and Youth Subcultures.** English 379R (Topic: Popular Music and Youth Subcultures) and 379R (Topic 6) may not both be counted.

**Topic 7: Literature and Culture of the 1960s.** English 379R (Topic: Literature and Culture of the 1960s) and 379R (Topic 7) may not both be counted.

**Topic 8: The Great War and Modern British Literature.** English 379R (Topic: The Great War and Modern British Literature) and 379R (Topic 8) may not both be counted.

**Topic 9: London: One Hundred Years Ago.** English 379R (Topic: London in 1910: A Global Perspective) and 379R (Topic 9) may not both be counted.

**Topic 10: Poets and Punks: British Culture since 1945.** An examination of and research into the history of literature, popular music, and youth subcultures in England since 1945, including the development of cultural studies. Subjects explored include conventional notions of the hierarchy of high and mass culture, the issue of what avant-garde practice involves, and the forms it might take. Three lecture hours a week for one semester. English 379R (Topic: Poets and Punks) and 379R (Topic 10) may not both be counted.

Topic 11: Epics of the West. English 379R (Topic: Epics of the West) and 379R (Topic 11) may not both be counted.

# Center for Asian American Studies

### **Asian American Studies: AAS**

#### **Lower-Division Courses**

#### AAS 301. Introduction to Asian American Studies.

Same as American Studies 315 (Topic 1). Introduces the interdisciplinary study of Asian immigrants and Asian Americans in the United States. Explores key concepts, including immigration history, identity and community formation, cultural representation, and the intersections of race, class, gender, and sexuality. Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 315 (Topic: Introduction to Asian American Studies), 315 (Topic 1), Asian American Studies 301, Sociology 308 (Topic: Introduction to Asian American Studies).

#### AAS 310. Introductory Topics in Asian American Studies.

An introduction to Asian American studies through a variety of disciplines. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Psychological Perspectives on Asian American Identity.** Examines the unique culturally-influenced psychologies of various Asian American groups, including such concepts as identity formation, enculturation, assimilation and resistance, and racial and psychological normativity. Only one of the following may be counted: American Studies 315 (Topic: Psychological Perspectives on Asian American Identity), Asian American Studies 310 (Topic: Psychological Perspectives on Asian American Identity), 310 (Topic 1).

**Topic 2: Race, Politics, and Identity in Asian America.** Same as Government 314 (Topic 7). An introduction to Asian American politics. Subjects include the American political process, and the historic and contemporary role of Asian Americans within that process. Only one of the following may be counted: Asian American Studies 310 (Topic: Race, Identity, and Politics in Asian America), 310 (Topic 2), Government 314 (Topic: Race, Identity and Politics in Asian America), 314 (Topic 7).

**Topic 3: Mixed Race Identities.** Same as American Studies 315 (Topic 2). Analyzes the historical and contemporary significance of issues of "race" and "mixing" in a North American context. Subjects include the situation of "mixed race" people throughout United States history; historical policies that have shaped racial formation in the United States; comparative conceptions of "mixed" people transnationally; and racial, ethnic, and cultural identity. Only one of the following may be counted: American Studies 315 (Topic: Mixed Race and the Media), 315 (Topic 2), Asian American Studies 310 (Topic: Mixed Race and the Media), 310 (Topic 3).

**Topic 4: Asian American Creative Arts.** Issues and identities shaped by issues of race, ethnicity, gender, immigration status, and family dynamics. These subjects are explored through production of literary, artistic, performance, or other creative projects. Only one of the following may be counted: American Studies 315 (Topic: Asian American Theatre and Dance), Asian American Studies 310 (Topic: Asian American Theatre and Dance), 310 (Topic 4), Theatre and Dance 311T (Topic: Asian American Theatre and Dance).

**Topic 5: Race, Immigration, and Family.** Same as American Studies 315 (Topic 3) and Women's and Gender Studies 301 (Topic 24). Introduction to family systems in the United States in a post-WWII framework with a central focus on Asian Americans. Students will investigate how gender, race, and ethnicity intersect and inform our understanding of the institution of the family. Only one of the following may be counted: American Studies 315 (Topic: Alternative

Family Systems), 315 (Topic 3), Asian American Studies 310 (Topic: Alternative Family Systems), 310 (Topic 5), Women's and Gender Studies 301 (Topic: Alternative Family Systems), 301 (Topic 24). **Topic 6: Asian American Film History.** Same as American Studies 315 (Topic 7). Only one of the following may be counted: American Studies 315 (Topic: Asian American Film History), American Studies 315 (Topic 7), Asian American Studies 310 (Topic: Asian American Film History), Asian American Studies 310 (Topic 6), Radio-Television-Film 301N (Topic: Asian American Film History).

#### AAS 312. Introduction to Asian American History.

Same as History 317L (Topic 4). Introduces students to the national and transnational histories of Asian Americans in the United States. Explores a wide range of themes related to the Asian American experience. Asian American Studies 312 and History 317L (Topic 4) may not both be counted.

#### AAS 314. Asian American Literature and Culture.

Same as English 314V (Topic 2: Asian American Literature and Culture). Explores how authors and artists over the course of the past century have imagined what it means to be Asian American. Covers a diverse range of Asian immigrant histories and the formation of Asian American identities according to ethnicity, gender, sexuality, class, and citizenship. Three lecture hours a week for one semester. Prerequisite: English 603A, Rhetoric and Writing 306, 306Q, or Tutorial Course 603A.

#### AAS 318Q. Supervised Research.

For Asian American studies majors only. Supervised, student-derived research in Asian American studies. Individual instruction. May be repeated for credit when the research projects vary. Prerequisite: Rhetoric and Writing 306 and consent of the director of the Center for Asian American Studies.

### **Upper-Division Courses**

# AAS 320. Topics in Asian American Culture, Literature, and Media Studies.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Immigrants, Amusements, and Consumer Culture.** Same as American Studies 370 (Topic 25: Immigrants, Amusements, and Consumer Culture). Studies the growth of consumer capitalism as it coincides with the migration and integration of immigrants into American society. Examines the emergence of consumer culture as a force that defines modern American society and traces its developments and current manifestations throughout the world. Prerequisite: Upper-division standing.

**Topic 2: Comparative Cultures of Beauty.** Same as American Studies 370 (Topic 24: Comparative Cultures of Beauty) and Women's and Gender Studies 345 (Topic 45: Comparative Cultures of Beauty). Examines fashion and beauty as discourses and cultural practices affecting identity, body politics, race, gender, sexuality, and class. Additional prerequisite: Upper-division standing.

**Topic 3: Contemporary Asian American Novels.** Same as English 376M (Topic 5). Asian American Studies 320 (Topic 3) and English 376M (Topic 5) may not both be counted.

**Topic 4: Asian American Media Cultures.** Same as Radio-Television-Film 359 (Topic 3). Examines popular and critical roles, representations, and politics of Asian Americans in U.S. media including Hollywood cinema, U.S. network and cable television, Asian American independent film, and online media. Only one of the following may be counted: Asian American Studies 320 (Topic: Asian American Media Cultures), Asian American Studies 320 (Topic 4), Radio-Television-Film 359 (Topic: Asian American Media Cultures), Radio-Television-Film 359 (Topic 3). Additional prerequisite: Upperdivision standing.

**Topic 5: Global Indian Literature**. Same as Asian Studies 361 (Topic 47) and English 360L (Topic 3). Only one of the following may be counted: Asian American Studies 320 (Topic: Global Indian Literature), 320 (Topic 5), Asian Studies 361 (Topic: Global Indian Literature), 361 (Topic 47), English 360L (Topic: Global Indian Literature), 360L (Topic 3). Additional prerequisite: Nine semester hours of coursework in English or Rhetoric and Writing.

**Topic 6: Documenting Difference.** Explores the theory, history, practice and poetics of minority documentary, as well as the related fields of oral history and archiving with a particular emphasis on Asian American examples. Only one of the following may be counted: Asian American Studies 320 (Topic: Documenting Difference), Asian American Studies 320 (Topic 6), Radio-Television-Film 359S (Topic: Documenting Difference). Additional prerequisite: Upper-division standing.

**Topic 7: Race, Internet, and Social Media.** Same as American Studies 321 (Topic 12). Explores the critical, theoretical and practical analysis of race and new media. Only one of the following may be counted: American Studies 321 (Topic: Race, Internet & Social Media), American Studies 321 (Topic 12), Asian American Studies 320 (Topic: Race, Internet & Social Media), Asian American Studies 320 (Topic 7), Radio-Television-Film 359 (Topic: Race, Internet & Social Media). Additional prerequisite: Upper-division standing.

# AAS 325. Topics in Asian American Economics, History, and Government.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 2: The Chinese in Diaspora. Same as Asian Studies 361 (Topic 28) and History 350L (Topic 65). Explores narratives of migration, race, ethnicity, and a wide range of experiences of acculturation and assimilation from the perspective of a sending society--China-which has one of the longest and most diverse histories of sending people overseas. Over the last millennia, Chinese have migrated around the world and made homes under a great range of adversity and opportunity, producing many stories of human differences and commonalities. For 361, three lecture hours a week for one semester; for 461, four lecture hours a week for one semester. Only one of the following may be counted: Asian American Studies 325 (Topic: Chinese in Diaspora), 325 (Topic 2: The Chinese in Diaspora), Asian Studies 361 (Topic: Chinese in Diaspora), 361, 461 (Topic 28), History 350L (Topic: The Chinese in Diaspora), 350L (Topic 65: The Chinese Diaspora). Additional prerequisite: Upper-division standing Topic 3: The Chinese in the United States. Same as Asian Studies 340S and History 340S. History of the Chinese in the United States from their first arrival in significant numbers during the California Gold Rush of the mid-nineteenth century to the present. Three lecture hours a week for one semester. Only one of the following may be counted: Asian American Studies 325 (Topic: Chinese in the United States), 325 (Topic 3), Asian Studies 340S, History 340S. Additional prerequisite: Upper-division standing.

**Topic 4: Taiwan: Colonization, Migration, and Identity.** Same as Asian Studies 340T and History 340T. Explores issues of ethnicity, empire, and modernization in East Asia from the sixteenth century to the present, as seen through encounters between Taiwan and aborigines, Han Chinese, Dutch, Portuguese, the imperial Qing, Japanese, mainland Chinese Nationalist Party (KMT), and the United States. Only one of the following may be counted: Asian American Studies 325 (Topic 4), Asian Studies 340T, 361 (Topic: Taiwan: Colonization, Migration, and Identity), History 340T, 364G (Topic: Taiwan: Colonization, Migration, and Identity). Prerequisite: Upperdivision standing. Topic 5: Asian American Jurisprudence. Same as American Studies 321 (Topic 5: Asian American Jurisprudence) and Government 357M (Topic 9: Asian American Jurisprudence). Introduction to the study of Asian Americans and the law. Examines the historical development of United States law and its relationship to Asian Americans, and of Asian American jurisprudence as an independent field of legal scholarship. Additional prerequisite: Upper-division standing. Topic 6: Cuisine and Culture in Asia. Same as Asian Studies 379 (Topic 7). Explores various themes related to food preparation, distribution, and consumption in the shaping of modern Asian societies, including gender; family; politics and nationalism; political economy of food; immigration; diaspora and cuisine; globalization of food brands and fast food outlets; aesthetics; tourism and travel; and how Asian food is represented in media. Only one of the following may be counted: Asian American Studies 325 (Topic 6); Asian Studies 379 (Topic: Cuisine and Culture in Asia), 379 (Topic 7).

Topic 7: The Two Koreas and the United States. Same as Asian Studies 361 (Topic 24). The political, social, and cultural relationship between North and South Korea, and between the Koreas and the United States, since 1945. Only one of the following may be counted: Anthropology 324L (Topic: The Two Koreas and the US), Asian American Studies 325 (Topic: The Two Koreas and the US), 325 (Topic 7), Asian Studies 361 (Topic 24), Government 360N (Topic: The Two Koreas and the US), History 364G (Topic: The Two Koreas and the US). Topic 8: History of the Southeast Asian Diaspora in the United States. Same as History 365G (Topic 11). Only one of the following may be counted: Asian American Studies 325 (Topic: History of the Southeast Asian Diaspora in the United States), 325 (Topic 8), History 365G (Topic: History of the Southeast Asian Diaspora in the United States), 365G (Topic 11). Additional prerequisite: Upper-division standing. Topic 9: South Asian Migration to the United States. Same as Asian Studies 372 (Topic 43), History 365G (Topic 14), and Women's and Gender Studies 340 (Topic 35). Examines the South Asian diaspora in the United States. Only one of the following may be counted: Asian American Studies 325 (Topic: South Asian Migration to the United States), Asian American Studies 325 (Topic 9), Asian Studies 372 (Topic: South Asian Migration to the United States), Asian Studies (Topic 43), History 365G (Topic: South Asian Migration to the United States), History 365G (Topic 14), Women and Gender Studies 340 (Topic: South Asian Migration to the United States), Women and Gender Studies 340 (Topic 35). Additional prerequisite: Upper-division standing.

**Topic 10: Refugees in Twentieth-Century United States.** Same as History 350R (Topic 37). Explores the history of refugees in the twentieth century, with special attention to the United States and its engagement in the international arena of refugee politics. Only one of the following may be counted: Asian American Studies 325 (Topic: Refugees in 20th-Century US), 325 (Topic 10), History 350R (Topic: Refugees in 20th-Century US), 350R (Topic 37). Additional prerequisite: Upper-division standing and six semester hours of coursework in history.

Topic 11: Global Economies: Asia and the United States. Same as Asian Studies 361 (Topic 48). Examines key trends in the economies of the United States and Asia, with emphasis on the links between these two major trading blocs. Only one of the following may be counted: Asian American Studies 325 (Topic: Global Economies: Asia & US), 325 (Topic 11), Asian Studies 361 (Topic: Global Economies: Asia & US), 361 (Topic 48). Additional prerequisite: Upper-division standing.

### AAS 330. Topics in Asian American Anthropology, Geography, and Sociology.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 2: Racism and Antiracism. Same as African and African Diaspora Studies 324E. Examines the theories and definitions of racism across several fields: anthropology, sociology, psychology, cultural studies, postcolonial studies, and gender/sexuality studies. Also includes a section that focuses on anti-racist activism. particularly within people of color and immigrant communities. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 324E, 374D (Topic: Racism and Antiracism), 374D (Topic 10), Anthropology 324L (Topic: Racism and Antiracism), Asian American Studies 330 (Topic: Racism and Antiracism), 330 (Topic 2). Prerequisite: Upper-division standing. Topic 3: Blacks and Asians: Race and Social Movements. Same as African and African Diaspora Studies 374D (Topic 19) and Anthropology 324L (Topic 77). Examines the relations between Asians and Blacks in the United States. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: Blacks/ Asians: Race/Social Movements), 374D (Topic 19), Anthropology 324L (Topic: Blacks/Asians: Race/Social Movements), 324L (Topic 77), Asian American Studies 330 (Topic: Blacks/Asians: Race/Social Movements), 330 (Topic 3). Additional prerequisite: Upper-division standing.

**Topic 4: The Sociology of Race and Work.** Same as Sociology 321R and Women's and Gender Studies 322 (Topic 6). Critical examination of work in the United States over the twentieth and twenty-first centuries through a gendered, Asian American lens, using a comparative race perspective. Subjects include the sociological examination of concepts such as labor markets, globalization, care work, and gender/racial segregation in the workplace along with the ways race and gender shape how and where individuals are fitted into the workplace, how skills are evaluated, and how labor markets emerge. Three lecture hours a week for one semester. Only one of the following may be counted: Asian American Studies 330 (Topic: Sociology of Race and Work), 330 (Topic 4), Sociology 321K (Topic: Sociology of Race and Work), 321R, Women's and Gender Studies 322 (Topic: Sociology of Race and Work), 322 (Topic 6). Additional prerequisite: Upper-division standing.

**Topic 5: Transnational Korea.** Same as Asian Studies 379 (Topic 6). Recent and contemporary manifestations of the Koreas in the world and the world in the Koreas. Subjects include labor and marriage migration, educational sojourning, transnational adoption, tourism, international sport, corporate expatriation, and media flows. Only one of the following may be counted: Anthropology 324L (Topic: Transnational Korea); Asian American Studies 330 (Topic: Transnational Korea), 330 (Topic 5); Asian Studies 379 (Topic: Transnational Korea), 379 (Topic 6).

**Topic 6: Urban Unrest.** Same as African and African Diaspora Studies 372F (Topic 13), American Studies 321 (Topic 8), Anthropology 324L (Topic 46), and Urban Studies 354 (Topic 14). Analysis of the roots of urban unrest, exploring a range of origins: joblessness, state violence, white flight, backlash against civil rights gains, new immigration, and interracial strife. Beyond race and class, subjects include exploring unrest as a mode of pushing the normative boundaries of gender and sexuality in public space. Course material will draw from film, literature, history, geography, and anthropology. Only one of the following may be counted: African and African Diaspora Studies 372F (Topic: Urban Unrest), 372F (Topic 13), 374D (Topic: Urban Unrest), American Studies 321 (Topic: Urban Unrest), 324L (Topic 46), Asian American Studies 330 (Topic: Urban Unrest), 330 (Topic 6), Urban Studies 354 (Topic: Urban Unrest), 354 (Topic 14).

**Topic 7: Asian Mobilities.** Same as Asian Studies 361 (Topic 50). Three lecture hours a week for one semester. Only one of the following may be counted: Asian American Studies 330 (Topic: Asian Mobilities), 330 (Topic 7), Asian Studies 361 (Topic: Asian Mobilities), 361 (Topic 50). Additional prerequisite: Upper-division standing.

#### AAS 335. Topics in Asian American Studies.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Bridging Community Through Service Learning.** Explores culture in community life and how it affects the collaboration of service providing entities. Through service learning, students will take what they learn in the classroom and apply those theories and techniques within the community. Special emphasis will be given to the understanding of the Asian/Asian American community and multiculturalism in community services. Only one of the following may be counted: Asian American Studies 335 (Topic: Bridging Community Thru Service-Learning), 335 (Topic 1), Social Work 360K (Topic: Bridging Community Through Service Learning). Additional prerequisite: Upper-division standing.

#### AAS 358Q. Supervised Research.

For Asian American studies majors only. Supervised, student-derived research in Asian American studies. Individual instruction. May be repeated for credit when the research projects vary. Prerequisite: Upperdivision standing, Rhetoric and Writing 306, and consent of the director of the Center for Asian American Studies.

#### AAS 377. Capstone Seminar.

Restricted to Asian American studies majors. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upper-division standing and completion of fifteen hours of Asian American Studies coursework.

#### AAS 378. Community Internship.

Supervised internship in a community, civic, or government organization or program that facilitates the economic, political, and social development of the Asian American community. The equivalent of three lecture hours a week for one semester, with additional field hours to be arranged. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: Upper-division standing and consent of the director of the Center for Asian American Studies.

#### AAS 379. Conference Course in Asian American Studies.

Supervised individual study of selected problems in Asian American studies. Conference course. May be repeated for credit. Prerequisite: Upper-division standing and consent of the director of the Center for Asian American Studies.

#### AAS 679H. Honors Tutorial Course.

Supervised individual reading for one semester, followed by a semester of research and writing to produce a substantial paper on a specific topic in Asian American studies. Conference course for two semesters. Prerequisite: For 679HA, upper-division standing and admission to the Asian American Studies Honors Program; for 679HB, Asian American Studies 679HA.

### **Center for European Studies**

### **European Studies: EUS**

#### **Lower-Division Courses**

# EUS 302. Introductory Interdisciplinary Topics in European Studies.

Analysis of various aspects of European culture, science, and technology. Three lecture hours a week for one semester. Only one of the following may be counted unless the topics vary: European Studies 302, 306, 307, 308. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

#### EUS 305. Introduction to European Studies.

The myths, ideas, and sociopolitical realities that underpin the intellectual and cultural construction of Europe. Three lecture hours a week for one semester.

# EUS 306. Introductory Topics in European Anthropology, Geography, History, and Sociology.

Three lecture hours a week for one semester. Only one of the following may be counted unless the topics vary: European Studies 302, 306, 307, 308. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 1: Race and Gender Stereotypes in Germany. Same as German, Scandinavian, and Dutch Studies 311D. Examination of pseudoscientific popular theories of "race" and gender that developed in Germany and elsewhere in Europe in the nineteenth century, and how these affected the lives of millions and shaped current thinking about "racial" and gender differences. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 306 (Topic: Bad Blood), 306 (Topic 1), German, Scandinavian, and Dutch Studies 311D, Germanic Civilization 301 (Topic: Bad Blood). Topic 2: Introduction to the History and Culture of Spain. Same as Ancient History and Classical Civilization 310 (Topic 1) and History 306N (Topic 13). The history of Spain from its beginnings in the stone age through the great social and economic upheavals of the twentieth century. Three lecture hours a week for one semester. Only one of the following may be counted: Ancient History and Classical Civilization 310 (Topic: Introduction to the History and Culture of Spain), 310 (Topic 1), European Studies 306 (Topic: Introduction to the History and Culture of Spain), 306 (Topic 2), History 306N (Topic: Introduction to the History and Culture of Spain), 306N (Topic 13).

**Topic 3: The Roots of Religious Toleration**. Same as History 317N (Topic 1), Jewish Studies 311 (Topic 5), and Religious Studies 306 (Topic 1). Examines how freedom of conscience and religion crystallized in western and central Europe, both as a pragmatic practice and as a matter of principle. Only one of the following may be counted: Core Texts and Ideas 310 (Topic: Roots of Religious Toleration), European Studies 306 (Topic: Roots of Religious Toleration), 306 (Topic 3), History 317N (Topic: Roots of Religious Toleration), 317N (Topic 1), Jewish Studies 311 (Topic: Roots of Religious Toleration), 317 (Topic 5), Religious Studies 306 (Topic: Roots of Religious Toleration), 311 (Topic 5), Religious Studies 306 (Topic: Roots of Religious Toleration), 306 (Topic 1).

**Topic 4: Jewish Civilization: 1492 to the Present.** Same as History 306N (Topic 11), Jewish Studies 304N, and Religious Studies 313N. Subjects may include trends toward secularization, the emancipation of European Jewry, the emergence of American Jewry, the Holocaust, the establishment of the State of Israel, and the Arab-Israeli conflict. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 306 (Topic: Jewish Civilization: 1492 to the Present), 306 (Topic 4), History 306N (Topic 11), Jewish Studies 304N, 311 (Topic: Jewish Civilization: 1492 to the Present), Religious Studies 313 (Topic: Jewish Civilization: 1492 to the Present), 313N.

### EUS 307. Introductory Topics in European Culture, Literature, Art, Music, and Media.

Three lecture hours a week for one semester. Only one of the following may be counted unless the topics vary: European Studies 302, 306, 307, 308. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 1: The Vampire in Slavic Cultures. Same as Comparative Literature 305 (Topic 2) and Russian, East European, and Eurasian Studies 302 (Topic 1). Examines the vampire in the cultures of Russia and Eastern Europe, including manifestations in literature, religion, art, film, and common practices from its origins to present. Only one of the following may be counted: Comparative Literature 305 (Topic: The Vampire in Slavic Cultures), 305 (Topic 2), European Studies 307 (Topic: The Vampire in Slavic Cultures), 307 (Topic 1), Russian, East European, and Eurasian Studies 302 (Topic: The Vampire in Slavic Cultures), 302 (Topic 1), Slavic 301 (Topic: The Vampire in Slavic Cultures), 301 (Topic 1).

Topic 2: Introduction To Czech History and Culture: Puppets, Pubs, And Polyglots. Same as Russian, East European, and Eurasian Studies 302 (Topic 3). Survey of Czech history and culture from the middle ages to the present day. Subjects include the culture of daily life, literature, history, philosophy, and the arts. Only one of the following may be counted: Czech 301K (Topic: Puppets, Pubs And Polyglots: Introduction To Czech History and Culture), 301K (Topic 3), European Studies 307 (Topic: Puppets, Pubs And Polyglots: Introduction To Czech History and Culture), 307 (Topic 2), Russian, East European, and Eurasian Studies 302 (Topic: Puppets, Pubs And Polyglots: Introduction To Czech History and Culture), 302 (Topic 3). Topic 4: Movies Go To War. Same as American Studies 315C,

Comparative Literature 305 (Topic 3), and German, Scandinavian, and Dutch Studies 311C. A comparison of films from various nations about major twentieth century wars to the historical facts of the conflicts as practicums in critical comparative analysis of histories as representations. Only one of the following may be counted: American Studies 315 (Topic: Movies Go to War, World War I to Vietnam), 315C, Comparative Literature 305 (Topic: Movies Go to War, World War I to Vietnam), 305 (Topic 3), European Studies 307 (Topic: Movies Go to War, World War I to Vietnam), 307 (Topic 4), German, Scandinavian, and Dutch Studies 311C, Germanic Civilization 311 (Topic 2: Movies Go to War, World War I to Vietnam).

**Topic 5: Grimms' Fairy Tales.** Same as Comparative Literature 305 (Topic 4) and German, Scandinavian, and Dutch Studies 311E. Reading and discussion of tales from the Grimms' collection, as well as some of the relevant secondary literature. Three lecture hours a week for one semester. Only one of the following may be counted: Comparative Literature 305 (Topic: Grimms' Fairy Tales), 305 (Topic 4), European Studies 307 (Topic: Grimms' Fairy Tales), 307 (Topic 5), German, Scandinavian, and Dutch Studies 310 (Topic: Grimms' Fairy Tales), 311E, Germanic Civilization 301 (Topic: Grimms' Fairy Tales).

#### EUS 307M. An Introduction to Western Music.

Same as Music 302L. Introduction to musical styles in the Euro-American art music tradition between the Middle Ages and the present day. Designed to foster critical listening and thinking about music, and deepen understanding of the vital role that music has played and continues to play in society and in individual lives. Three lecture hours a week for one semester, with one laboratory hour a week as required. Only one of the following may be counted: European Studies 307 (Topic: Introduction to Western Music), 307M, Music 302L.

### EUS 308. Introductory Topics in European Economics, Government, Business, and Policy.

Three lecture hours a week for one semester. Only one of the following may be counted unless the topics vary: European Studies 302, 306, 307, 308. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Germany and Globalization.** Same as American Studies 315 (Topic 8) and German, Scandinavian, and Dutch Studies 311F. Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 315 (Topic: Germany and Globalization), 315 (Topic 8), European Studies 308 (Germany and Globalization), 308 (Topic 1), German, Scandinavian, and Dutch Studies 310 (Topic:

Germany and Globalization), 311F, Germanic Civilization 301 (Topic: Germany and Globalization).

#### EUS 113. Preparation for Study Abroad in Europe.

One lecture hour a week for one semester. May not be counted by students who have previously taken an international learning seminar. Offered on the pass/fail basis only.

#### EUS 318Q. Supervised Research.

Individual instruction.

#### EUS 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in European Studies.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Center for European Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### **Upper-Division Courses**

#### EUS 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in European Studies.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Center for European Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### EUS 340M. Continuity and Change in Modern France.

Same as French Civilization 340M. Focuses on various social, political, and cultural crises in France from the revolution of 1789 to the present time. Three lecture hours a week for one semester. European Studies 340M and French Civilization 340M may not both be counted. May not be counted toward fulfillment of the foreign language requirement for any bachelor's degree. Prerequisite: Upper-division standing.

### EUS 346. Topics in European Anthropology, Geography, History, and Sociology.

Three lecture hours a week for one semester. Only one of the following may be counted unless the topics vary: European Studies 346, 347, 348, 363. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: History of Britain from 1783 through World War I.** Same as History 358M. Surveys the political, social, economic, and intellectual history of Great Britain from the years preceding the outbreak of the French Revolution to the conclusion of World War I. Three lecture hours a week for one semester. European Studies 346 (Topic 1)and History 358M may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 2: Great Discoveries in Archaeology.** Same as Anthropology 326F. The stories, myths, and people behind some of the great archaeological discoveries. Only one of the following may be counted: Anthropology 324L (Topic: Great Discoveries in Archaeology), Anthropology 326F, European Studies 346 (Topic 2). Prerequisite: Upper-division standing.

**Topic 3: Witches, Workers, and Wives.** Same as History 343W and Women's and Gender Studies 345 (Topic 29: Witches, Workers, and Wives). Explores the role of families and concepts of gender as expressed in key economic, social, political, and cultural patterns in early modern Europe. Prerequisite: Upper-division standing.

**Topic 4: Law and Society in Early Modern Europe.** Same as History 350L (Topic 57: Law and Society in Early Modern Europe) and Women's and Gender Studies 340 (Topic 13: Law and Society in Early Modern Europe). Research seminar on how historians have explored the significance of law, criminal and civil, in the lives of early modern Europeans. Topics include infanticide, fornication, drunkenness, theft, debt, slander, and family disputes. Only one of the following may be counted: European Studies 346 (Topic 4), History 350L (Topic 57), Women's and Gender Studies 340 (Topic 13).

**Topic 5: Vienna: Memory and the City.** Same as American Studies 370 (Topic 41), History 362G (Topic 2), and Urban Studies 354 (Topic 7). Examines the ways in which cultural memory has shaped, and continues to shape, urban life in Vienna, Austria. Only one of the following may be counted: American Studies 315 (Topic: Vienna: Memory and the City), 370 (Topic 41), European Studies 306 (Topic: Vienna: Memory and the City), 346 (Topic 5), Geography 309 (Topic: Vienna: Memory and the City), History 306N (Topic: Vienna: Memory and the City), History 306N (Topic: Vienna: Memory and the City), J62G (Topic 2), Urban Studies 305 (Topic: Vienna: Memory and the City), 354 (Topic 7). Additional prerequisite: Upperdivision standing.

Topic 6: Sport and English Society. Same as Sociology 323M. Restricted to students in the Maymester Abroad Program: contact the University's Study Abroad Office for permission to register for this class. Uses the context of sport to explore the internal divisions around class and region that are central to understanding English identity, particularly the tensions between "the north" and "the south," as well as to discover the origins of American sports such as football and baseball. The equivalent of three lecture hours a week for one semester. Taught in Leeds, England. Only one of the following may be counted: European Studies 346 (Topic: Sport and English Society), 346 (Topic 6), Kinesiology 350, Sociology 321K (Topic: Sport and English Society), 323M. Additional prerequisite: Upper-division standing. Topic 7: Globalization. Same as Sociology 340C. A sociological analysis of the interrelated economic, political, and cultural aspects of globalization. Examines the consequences of globalization for nations around the world and for groups within these nations. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic: Globalization), 346 (Topic 7), Sociology 321K (Topic: Globalization), 340C. Additional prerequisite: Upper-division standing.

**Topic 8: Heretics and Freedom Fighters, 1350-1650.** Same as German, Scandinavian, and Dutch Studies 360 (Topic 3), History 362G (Topic 12), and Religious Studies 357 (Topic 12). Explores the theologies, politics, and personal identities that emerged and passed away in this era. Only one of the following may be counted: Czech 324 (Topic: Heretics and Freedom Fighters, 1350-1650), 324 (Topic 4), European Studies 346 (Topic: Heretics and Freedom Fighters, 1350-1650), 346 (Topic 8), Germanic Civilization 327E (Topic: Heretics and Freedom Fighters, 1350-1650), German, Scandinavian, and Dutch Studies 360 (Topic 3), History 362G (Topic: Heretics and Freedom Fighters, 1350-1650), 362G (Topic 12), Religious Studies 357 (Topic: Heretics and Freedom Fighters, 1350-1650), 357 (Topic 12), Russian, East European, and Eurasian Studies 325 (Topic: Heretics and Freedom Fighters, 1350-1650), 325 (Topic 28).

**Topic 9: Northern Lands and Cultures.** Same as Geography 356T (Topic 4) and Russian, East European, and Eurasian Studies 345 (Topic 6). Develops geographical understanding of the Circumpolar region of the North, an ancient human habitat, home to distinct millennia-old civilizations. Only one of the following may be counted: European Studies 346 (Topic: Northern Lands and Cultures), 346 (Topic 9), Geography 356T (Topic: Northern Lands and Cultures), 356T (Topic 4), Russian, East European, and Eurasian Studies 345 (Topic: Northern Lands and Cultures), 345 (Topic 6). Additional prerequisite: Upper-division standing.

Topic 10: Women and the Holocaust. Same as Comparative Literature 323 (Topic 19), German, Scandinavian, and Dutch Studies 341F, Jewish Studies 363 (Topic 11), and Women's and Gender Studies 340 (Topic 50). Introduction to both the history of Jewish and German women during World War II and the Holocaust, and to women's narratives and self-representations of this period. Historical sources, memoirs, films, and interviews will be used as source material. Three lecture hours a week for one semester. Only one of the following may be counted: Comparative Literature 323 (Topic: Women's Narratives of the Holocaust and World War II), 323 (Topic 19), European Studies 346 (Topic: Women's Narratives of the Holocaust and World War II), 346 (Topic 10), German, Scandinavian, and Dutch Studies 341F, Germanic Civilization 323E (Topic: Women's Narratives of the Holocaust and World War II), Jewish Studies 363 (Topic 11), Women's and Gender Studies 340 (Topic: Women's Narratives of the Holocaust and World War II), 340 (Topic 50). Additional prerequisite: Upper-division standing.

**Topic 11: The Spanish Inquisition.** Same as History 350L (Topic 77), Jewish Studies 364 (Topic 5), and Religious Studies 357 (Topic 10). Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic: The Spanish Inquisition), 346 (Topic 11), History 350L (Topic: The Spanish Inquisition), 350L (Topic 77), Jewish Studies 364 (Topic: The Spanish Inquisition), 364 (Topic 5), Religious Studies 357 (Topic: The Spanish Inquisition), 357 (Topic 10).

Topic 12: World War II in Eastern Europe. Same as History 350L (Topic 79), Jewish Studies 364 (Topic 11), and Russian, East European, and Eurasian Studies 335 (Topic 19). Examines the war in Eastern Europe with a particular emphasis on occupation, collaboration, and resistance; the Holocaust; and the connection between ethnic cleansing, population transfer, and the establishment of communism in postwar Eastern Europe. Only one of the following may be counted: European Studies 346 (Topic: World War II in Eastern Europe), 346 (Topic 12), History 350L (Topic: World War II in Eastern Europe), History 350L (Topic 79), Jewish Studies 364 (Topic: World War II in Eastern Europe), 364 (Topic 11), Russian, East European, and Eurasian Studies 335 (Topic: World War II in Eastern Europe), 335 (Topic 19). Topic 13: Creation. Same as History 350L (Topic 80) and Religious Studies 373 (Topic 5). Explores the writings of premodern authors as related to creation and early developments in western theology, science, and philosophy. Only one of the following may be counted: European Studies 346 (Topic: Creation), 346 (Topic 13), History 350L (Topic: Creation), 350L (Topic 80), Religious Studies 373 (Topic: Creation), 373 (Topic 5), Women's and Gender Studies 345 (Topic: Creation).

**Topic 14: Enlightenment and Revolution.** Same as Core Texts and Ideas 375 (Topic 3) and History 350L (Topic 81). Examines the relationship between the intellectual project of the Enlightenment and the political and social transformations that unfolded in western Europe and North America from the beginnings of the Dutch Revolt in the 1560s to the decade following the Paris Commune of 1871. Only one of the following may be counted: Core Texts and Ideas 375 (Topic: Enlightenment and Revolution), 375 (Topic 3), European Studies 346 (Topic: Enlightenment and Revolution), 350L (Topic 14), History 350L (Topic: Enlightenment and Revolution), 350L (Topic 81). Additional prerequisite: Upper-division standing.

**Topic 15: Early Western Colonialism.** Same as History 362G (Topic 5). An examination of the phenomenon of colonialism, with an emphasis on the European expansion across the globe that began at the end of the western Middle Ages and continued throughout the early modern period. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic: Early Western Colonialism), 346 (Topic 15), History 362G (Topic: Early Western Colonialism), 362G (Topic 5).

**Topic 16: Eastern Europe in the Twentieth Century.** Same as History 362G (Topic 7) and Russian, East European, and Eurasian Studies 335 (Topic 16). Examines the major political, social, and cultural events that shaped Eastern European society in the twentieth century. Only one of the following may be counted: European Studies 346 (Topic: Eastern Europe in the 20th-Century), 346 (Topic 16), History 362G (Topic: Eastern European, and Eurasian Studies 335 (Topic: Eastern Europe in the 20th-Century), 362G (Topic 7), Russian, East European, and Eurasian Studies 335 (Topic: Eastern Europe in the 20th-Century), 335 (Topic 16).

**Topic 17: Introduction to the Holocaust.** Same as History 362G (Topic 3), Jewish Studies 364 (Topic 6), and Russian, East European, and Eurasian Studies 335 (Topic 17). Examines the mass killing of Jews and other victims in the context of Nazi Germany's quest for race and space during World War II. Only one of the following may be counted: European Studies 346 (Topic: Introduction to the Holocaust), 346 (Topic 17), History 362G (Topic: Introduction to the Holocaust), 362G (Topic 3), Jewish Studies 364 (Topic: Introduction to the Holocaust), 364 (Topic 6), Middle Eastern Studies 325 (Topic: Introduction to the Holocaust), Russian, East European, and Eurasian Studies 335 (Topic: Introduction to the Holocaust), 335 (Topic 17).

**Topic 18: Southeast Europe in the Twentieth Century.** Same as History 362G (Topic 9), Jewish Studies 364 (Topic 8), and Russian, East European, and Eurasian Studies 335 (Topic 18). Explores the key events and developments of Southeastern Europe, the region commonly referred to as the Balkans, in the twentieth century. Only one of the following may be counted: European Studies 346 (Topic: Southeast Europe in the Twentieth Century), 346 (Topic 18), History 362G (Topic: Southeast Europe in the Twentieth Century), 362G (Topic 9), Jewish Studies 364 (Topic: Southeast Europe and Eurasian Studies 335 (Topic: Southeast Europe in the Twentieth Century), 335 (Topic 18).

Topic 19: Regions and Cultures of Europe. Same as Geography 326 and Russian, East European, and Eurasian Studies 345 (Topic 2). Spatial patterns in Europe, with emphasis on cultural, historical, and political geography. Only one of the following may be counted: European Studies 346 (Topic: Regions and Cultures of Europe), 346 (Topic 19), Geography 326, Russian, East European, and Eurasian Studies 345 (Topic 2). Additional prerequisite: Upper-division standing. Topic 20: Protest, Revolt, and Revolution in West Germany. Same as German, Scandinavian, and Dutch Studies 361J. Explores pivotal political and cultural movements in post-1945 West Germany, including the student movement, terrorism, feminism, the Green movement, and the anti-nuclear movement. Students engage with a wide array of primary and secondary sources ranging from literature and films to essays, newspaper articles, and speeches in order to examine the roots and results of protest, revolt, and revolution during this period of German history. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic: Protest, Revolt, and Revolution in Postwar Germany), 346 (Topic 20), German, Scandinavian, and Dutch Studies 360 (Topic: Protest, Revolt, and Revolution in Postwar Germany), 361 J, Germanic Civilization 360E (Topic: Protest, Revolt, and Revolution in Postwar Germany). Additional prerequisite: Upper-division standing. Topic 21: Spinoza and Modernity. Same as Core Texts and Ideas 321F, History 362P, Jewish Studies 364 (Topic 9), Philosophy 354 (Topic 7), and Religious Studies 357 (Topic 8). Introduction to the core of Spinoza's writings and the diverse reactions they have elicited. Examines Spinoza's refusal of mind-body dualism, as well as a transcendent god or ideal as a way of understanding Spinoza's concepts and ideas. Three lecture hours a week for one semester. Only one of the following may be counted: Core Texts and Ideas 335 (Topic: Spinoza and Modernity), 321F, European Studies 346 (Topic: Spinoza and Modernity), 346 (Topic 21), 347 (Topic: Spinoza and Modernity), History 362G (Topic: Spinoza and Modernity), 362P,

Jewish Studies 364 (Topic: Spinoza and Modernity), 364 (Topic 9), Philosophy 334K (Topic: Spinoza and Modernity), 354 (Topic: Spinoza and Modernity), 354 (Topic 7), Religious Studies 357 (Topic: Spinoza and Modernity), 357 (Topic 8). Additional prerequisite: Upper-division standing.

Topic 22: German Nationalisms. Same as Government 365N (Topic 19), German, Scandinavian, and Dutch Studies 361K, and Russian, East European, and Eurasian Studies 335 (Topic 20). History of diverse views and movements regarding German national identity within their respective contexts, 1800-present. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic: German Nationalisms), 346 (Topic 22), German, Scandinavian, and Dutch Studies 361K, Germanic Civilization 360E (Topic 3), Government 365N (Topic 6), 365N (Topic 19), Russian, East European and Eurasian Studies 335 (Topic: German Nationalisms), 335 (Topic 20). Additional prerequisite: Upper-division standing. Topic 23: Holocaust Aftereffects. Same as Comparative Literature 323 (Topic 40), German, Scandinavian, and Dutch Studies 360 (Topic 1), Jewish Studies 365 (Topic 14), Religious Studies 357 (Topic 18), and Women's and Gender Studies 340 (Topic 66). Explores the historical, political, psychological, theological, and cultural fallout of the Holocaust, as well as literary and cinematic responses in Europe and the United States. Only one of the following may be counted: Comparative Literature 323 (Topic: Holocaust Aftereffects), 323 (Topic 40), European Studies 346 (Topic: Holocaust Aftereffects), 346 (Topic 23), German, Scandinavian, and Dutch Studies 360 (Topic 1), Germanic Civilization 323E (Topic: Holocaust Aftereffects), Jewish Studies 365 (Topic: Holocaust Aftereffects), 365 (Topic 14), Liberal Arts Honors 350 (Topic: Holocaust Aftereffects), Religious Studies 357 (Topic: Holocaust Aftereffects), 357 (Topic 18), Women's and Gender Studies 340 (Topic: Holocaust Aftereffects), 340 (Topic 66).

Topic 24: Europe since 1919. Same as History 323L. Survey course emphasizing the impact of the two world wars on European social, political, and cultural life in the twentieth century. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic: Europe since 1919), 346 (Topic 24), History 323L. Additional prerequisite: Upper-division standing. Topic 25: The French Revolution and Napoleon. Same as History 353. Analysis of the social, political, and economic origins and outcomes of the French Revolution and Napoleon's empire. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic: The French Revolution and Napoleon), 346 (Topic 25), History 353. Additional prerequisite: Upper-division standing.

Topic 26: History of Britain from the Restoration to 1783. Same as History 334J. Surveys the political, social, economic, and intellectual history of England and Great Britain from the restoration of the Stuart monarchy in 1660 to the conclusion of the War for American Independence in 1783. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic: History of Britain from the Restoration to 1783), 346 (Topic 26), History 334J. Additional prerequisite: Upper-division standing. **Topic 27: Italian Renaissance, 1350-1550.** Same as History 343G. Survey of political, socioeconomic, religious, and intellectual trends during the Italian Renaissance. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic: Italian Renaissance, 1350-1550), 346 (Topic 27), History 343G, 362K (Topic: Italian Renaissance, 1350-1550). Additional prerequisite: Upper-division standing.

**Topic 28: The Church and the Jews.** Same as History 362G (Topic 14), Jewish Studies 364 (Topic 10), and Religious Studies 357 (Topic 9). Examination of the complex relationship between the Western Church and Jews over two millenia. Only one of the following may be counted: European Studies 346 (Topic: The Church and the Jews), 346 (Topic 28), History 362G (Topic: The Church and the Jews), 362G (Topic 14),

Jewish Studies 364 (Topic: The Church and the Jews), 364 (Topic 10), Religious Studies 357 (Topic: The Church and the Jews), 357 (Topic 9). Additional prerequisite: Upper-division standing.

**Topic 29: Anti-Semitism in History and Literature.** Same as Comparative Literature 323 (Topic 42), German, Scandinavian, and Dutch Studies 361L, and Jewish Studies 364 (Topic 1). Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic: Anti-Semitism in History and Literature), 346 (Topic 29), Comparative Literature 323 (Topic: Anti-Semitism in History and Literature), 323 (Topic 42), German, Scandinavian, and Dutch Studies 360 (Topic: Anti-Semitism in History and Literature), 361L, Jewish Studies 361 (Topic: Anti-Semitism in History and Literature), 364 (Topic 1). Additional prerequisite: Upperdivision standing.

**Topic 32: The Sacred and the Secular in Modern European Thought.** Same as Core Texts and Ideas 335 (Topic 7), History 362G (Topic 19), and Religious Studies 357 (Topic 20). Introduces key themes and methodologies of intellectual history and social theory by exploring the dueling approaches to secularization and sacralization in modern European thought. Only one of the following may be counted: Core Texts and Ideas 335 (Topic: Sacred and Secular in Modern European Thought), 335 (Topic 7), European Studies 346 (Topic: Sacred and Secular in Modern European Thought), 346 (Topic 32), History 362G (Topic: Sacred and Secular in Modern European Thought), 362G (Topic: 19), Religious Studies 357 (Topic: Sacred and Secular in Modern European Thought), 357 (Topic 20). Additional prerequisite: Upperdivision standing.

# EUS 347. Topics in European Culture, Literature, Art, Music, and Media.

Three lecture hours a week for one semester. Only one of the following may be counted unless the topics vary: European Studies 346, 347, 348, 363. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Italian Civilization.** Same as Italian Civilization 360. Survey of the social, political, and cultural history of Italy. Taught in English. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 347 (Topic 1), Italian Civilization 360. With consent of the undergraduate adviser in the Department of French and Italian, may be counted toward a major in Italian. Additional prerequisite: Upper-division standing.

**Topic 3: Introduction to Germanic Religion and Myth.** Same as German, Scandinavian, and Dutch Studies 361C and Religious Studies 357 (Topic 17). Survey of the sources and main features of Germanic religion and of the transition from paganism to Christianity in northern Europe and the Germanic territories of western Europe. Subjects include cosmogonic myths; the origin of man and of society; the concept of the soul; gods and goddesses and their mythology; and the organization of worship. Three lecture hours a week for one semester. Only one of the following may be counted: English 322 (Topic 2), European Studies 347 (Topic 3), German, Scandinavian, and Dutch Studies 361C, Germanic Civilization 340E (Topic 1), Religious Studies 365 (Topic 2), Religious Studies 357 (Topic 17). Additional prerequisite: Upper-division standing.

**Topic 7: The European Novel.** Same as English 356. Selected masterpieces of continental fiction in English translation; representative novelists of the nineteenth and twentieth centuries. Three lecture hours a week for one semester. English 356 and European Studies 347 (Topic 7) may not both be counted. Additional prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

**Topic 11: Slavs in the Western Imagination.** Same as Comparative Literature 323 (Topic 28) and Russian, East European, and Eurasian Studies 325 (Topic 15). Examines representations of Eastern, Western,

and Southern Slavs in Western Europe and North America. Only one of the following may be counted: Comparative Literature 323 (Topic: Slavs in the Western Imagination), 323 (Topic 28), European Studies 347 (Topic: Slavs in the Western Imagination), 347 (Topic 11), Russian, East European, and Eurasian Studies 325 (Topic: Slavs in the Western Imagination), 325 (Topic 15), Slavic 324 (Topic: Slavs in the Western Imagination), 324 (Topic 4). Additional prerequisite: Upper-division standing.

Topic 12: Social Dramas of Henrik Ibsen. Same as Comparative Literature 323 (Topic 17), German, Scandinavian, and Dutch Studies 341D, and Women's and Gender Studies 345 (Topic 14). A detailed introduction to Ibsen's social dramas (1877-1899), emphasizing their unity as a prolonged commentary on the society of his era and the variety of its human problems. Special emphasis on subjects such as: the family and the home; the public world of reputation, work, and citizenship; the predicaments of men and women in a male-dominated society; and the motives of our interventions into the lives of others. Only one of the following may be counted: Comparative Literature 323 (Topic: Social Dramas of Henrik Ibsen), 323 (Topic 17), English 322 (Topic 17), European Studies 347 (Topic: Social Dramas of Henrik Ibsen), 347 (Topic 12), German, Scandinavian, and Dutch Studies 341D, Scandinavian 323 (Topic 2), Women's and Gender Studies 345 (Topic 14). Additional prerequisite: Upper-division standing. Topic 13: Films of Ingmar Bergman. Same as Comparative Literature 323 (Topic 11) and German, Scandinavian, and Dutch Studies 331C. An introduction to the films of Ingmar Bergman. Only one of the following may be counted: Comparative Literature 323 (Topic: Films of Ingmar Bergman), 323 (Topic 11), English 322 (Topic 18), European Studies 347 (Topic: Films of Ingmar Bergman), 347 (Topic 13), German, Scandinavian, and Dutch Studies 331C, Scandinavian 327 (Topic 9). Additional prerequisite: Upper-division standing. Topic 14: Hans Christian Andersen. Same as Comparative Literature 323 (Topic 12) and German, Scandinavian, and Dutch Studies 341E. Introduction to such Hans Christian Andersen tales as "The Little Mermaid," "The Ugly Duckling," and "The Emperor's New Clothes." Examination of their author and the romantic period in which they were written, as well as their historical, philosophical, and literary context. Only one of the following may be counted: Comparative Literature 323 (Topic: Hans Christian Andersen), 323 (Topic 12), English 322 (Topic 19), European Studies 347 (Topic: Hans Christian Andersen), 347 (Topic 14), German, Scandinavian, and Dutch Studies 341E, Germanic Civilization 323E (Topic 4), Scandinavian 373 (Topic 4). Additional prerequisite: Upper-division standing.

**Topic 15: Isak Dinesen/Karen Blixen.** Same as Comparative Literature 323 (Topic 14), German, Scandinavian, and Dutch Studies 341G, and Women's and Gender Studies 345 (Topic 13). An introduction to the twentieth-century Danish author Karen Blixen, focusing on her major themes such as gender and destiny, and examining her role as a literary figure. Only one of the following may be counted: Comparative Literature 323 (Topic: Isak Dinesen/Karen Blixen), 323 (Topic 14), European Studies 347 (Topic: Isak Dinesen/Karen Blixen), 347 (Topic 15), German, Scandinavian, and Dutch Studies 341G, Germanic Civilization 323E (Topic 1), Scandinavian 373 (Topic 6), Women's and Gender Studies 345 (Topic 13). Additional prerequisite: Upper-division standing.

**Topic 16: Contemporary Scandinavian Stories.** Same as Comparative Literature 323 (Topic 10) and German, Scandinavian, and Dutch Studies 341J. An analysis of contemporary Scandinavian literature and films, how they reflect Scandinavian reality, and how Scandinavian identity is created through sports, food, and politics. Only one of the following may be counted: Comparative Literature 323 (Topic: Contemporary Scandinavian Stories), 323 (Topic 10), European Studies 347 (Topic: Contemporary Scandinavian Stories), 347 (Topic 16), German, Scandinavian, and Dutch Studies 341J, Germanic Civilization 323E (Topic: Contemporary Scandinavian Stories), Scandinavian 373 (Topic: Contemporary Scandinavian Stories). Additional prerequisite: Upper-division standing.

Topic 17: The Scandinavian Contribution to World Literature. Same as Comparative Literature 323 (Topic 16) and German, Scandinavian, and Dutch Studies 341K. Close readings of the most influential Scandinavian texts, including works by Nobel Prize-winning authors such as Knut Hamsun and Selma Lagerlof, as well as the playwrights August Strindberg and Henrik Ibsen while addressing important themes caused by the revolutionary transition to modernity in Scandinavia around 1900, including emancipation of women and sexuality. Only one of the following may be counted: Comparative Literature 323 (Topic: The Scandinavian Contribution to World Literature), 323 (Topic 16), European Studies 347 (Topic: The Scandinavian Contribution to World Literature), 347 (Topic 17), German, Scandinavian, and Dutch Studies 341K, Germanic Civilization 323E (Topic: The Scandinavian Contribution to World Literature), Scandinavian 373 (Topic: The Scandinavian Contribution to World Literature). Additional prerequisite: Upper-division standing. Topic 18: Medieval Women Mystics. Same as German, Scandinavian, and Dutch Studies 361D, Religious Studies 357 (Topic 15), and Women's and Gender Studies 340 (Topic 51). The life and writings of Saint Birgitta of Sweden, fourteenth-century visionary, religious reformer, and pilgrim, examined and compared with her predecessor Hildegard of Bingen (Germany), her successor Margery Kempe (England), as well as Margery's mentor, Julian of Norwich. Social and historical contexts for all four of these women mystics will be explored in depth. Only one of the following may be counted: English 322 (Topic: Birgitta, Hildegard, and Margery), European Studies 347 (Topic: Birgitta, Hildegard, and Margery), 347 (Topic 18), German, Scandinavian, and Dutch Studies 361D, Germanic Civilization 327E (Topic 10: Birgitta, Hildegard, and Margery), Religious Studies 357 (Topic: Birgitta, Hildegard, and Margery), 357 (Topic 15), Scandinavian 373 (Topic 8: Birgitta, Hildegard, and Margery), Women's and Gender Studies 340 (Topic: Birgitta, Hildegard, and Margery), 340 (Topic 51). Additional prerequisite: Upper-division standing.

**Topic 19: Tolerance in Dutch Culture.** Same as German, Scandinavian, and Dutch Studies 361E and Women's and Gender Studies 340 (Topic 37). The historical roots of Dutch "tolerance" and how it plays a role in current Dutch culture and attitudes towards religious, gender, and sexual differences, as well as drug use, prostitution, and euthanasia. Exploration of the stereotypes and the actuality of these Dutch attitudes and policies from an international comparative perspective. Only one of the following may be counted: European Studies 347 (Topic: Dutch Culture: Too tolerant?), 347 (Topic 19), German, Scandinavian, and Dutch Studies 361E, Germanic Civilization 327E (Topic: Dutch Culture: Too tolerant?), Women's and Gender Studies 340 (Topic: Dutch Culture: Too tolerant?), 340 (Topic 37). Additional prerequisite: Upper-division standing.

**Topic 20: Squaring the Vienna Circle.** Same as Comparative Literature 323 (Topic 18) and German, Scandinavian, and Dutch Studies 361F. Traces the origin of the Vienna Circle of Logical Empiricism in nineteenth-century Europe, and introduces central texts and problems of intellectual history and historical epistemology at the roots of today's analytic philosophy. Only one of the following may be counted: Comparative Literature 323 (Topic: Squaring the Vienna Circle), 323 (Topic 18), European Studies 347 (Topic: Squaring the Vienna Circle), 347 (Topic 20), German, Scandinavian, and Dutch Studies 361F, Germanic Civilization 362E (Topic: Squaring the Vienna Circle), Philosophy 327 (Topic: Squaring the Vienna Circle). Additional prerequisite: Upper-division standing.

**Topic 23: Dante.** Same as English 366D and Italian Civilization 348. Three lecture hours a week for one semester. Only one of the following may be counted: English 322 (Topic 23), 366D, European Studies 347 (Topic: Dante), 347 (Topic 23), Italian Civilization 348, 349 (Topic 2). Additional prerequisite: Upper-division standing.

Topic 24: Feminism and Film: Women Filmmakers in Northern and Central Europe. Same as Comparative Literature 323 (Topic 33), German, Scandinavian, and Dutch Studies 331D, and Women's and Gender Studies 340 (Topic 65). An introduction to the work of women filmmakers from Scandinavia, Germany, as well as to the viewing and interpretation of films in general. Three lecture hours a week for one semester. Only one of the following may be counted: Comparative Literature 323 (Topic: Women Filmmakers in Northern and Central Europe), 323 (Topic 33), European Studies 347 (Topic: Women Filmmakers in Northern and Central Europe), 347 (Topic 24), German, Scandinavian, and Dutch Studies 330 (Topic: Women Filmmakers in Northern and Central Europe), 331D, Women's and Gender Studies 340 (Topic: Women Filmmakers in Northern and Central Europe), 340 (Topic 65). Additional prerequisite: Upper-division standing. Topic 26: Art in the Lives of Ordinary Romans. Same as Art History 327R. Art and architecture from the archaeological sites of Pompeii, Herculaneum, and Ostia as indices of Roman culture, 100 BC to AD 250. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 327R, European Studies 347 (Topic: Art in the Lives of Ordinary Romans), 347 (Topic 26). Topic 27: Northern Renaissance Art. 1350-1500. Same as Art History

332K and Religious Studies 357 (Topic 7). Northern European art from the International Style to van Eyck and Hieronymus Bosch. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 332K, European Studies 347 (Topic: Northern Renaissance Art, 1350-1500), 347 (Topic 27), Religious Studies 357 (Topic: Northern Renaissance Art, 1350-1500), 357 (Topic 7).

**Topic 28: Romanesque Art and Architecture.** Same as Art History 329R. Form and function of religious art in twelfth-century Europe. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 329R, European Studies 347 (Topic: Romanesque Art and Architecture), 347 (Topic 28).

**Topic 29: Early Italian Renaissance Art to 1470.** Same as Art History 331K. This course traces the beginnings of the "rebirth" (renaissance) of the visual arts, from the end of the Middle Ages to the heyday of the Medici. Works of art are analyzed both in formal terms and in relation to contemporary society, religion, philosophy, economics, statecraft, gender, and other significant issues. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 331K, European Studies 347 (Topic: Early Italian Renaissance Art to 1470), 347 (Topic 29).

**Topic 30: Gothic Cathedral: Amiens.** Same as Art History 330J and Religious Studies 357 (Topic 14). An examination of the cathedral at Amiens, its meaning, structure, political and financial contexts, and sculptural programs, as well as its influence on other buildings in France and Germany. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 330J, 374 (Topic: Gothic Cathedral: Amiens), European Studies 347 (Topic: Gothic Cathedral: Amiens), 347 (Topic 30), Religious Studies 357 (Topic: Gothic Cathedral: Amiens), 357 (Topic 14).

**Topic 31: The Age of Rembrandt and Rubens: Northern Baroque Art.** Same as Art History 333L and Religious Studies 357 (Topic 11). Northern European art in the seventeenth century, stressing the Netherlands and Flanders. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 333L, European Studies 347 (Topic: The Age of Rembrandt and Rubens: Northern Baroque Art), 347 (Topic 31), Religious Studies 357 (Topic: The Age of Rembrandt and Rubens: Northern Baroque Art), 357 (Topic 11).

**Topic 32: Northern Renaissance Art, 1500-1600.** Same as Art History 332L and Religious Studies 357 (Topic 6). Art and cultural development in the sixteenth century; artists include Duerer, Gruenewald, Holbein, and Brueghel. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 332L, European Studies 347 (Topic: Northern Renaissance Art, 1500-1600), 347 (Topic 32), Religious Studies 357 (Topic: Northern Renaissance Art, 1500-1600), 357 (Topic 6).

**Topic 33:** Art and the City in Renaissance Italy. Same as Art History 331P and Core Texts and Ideas 375 (Topic 4). Art, architecture, and emerging civic identity in Florence, Siena, Venice, and other Italian Renaissance city-states. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 331P, 364 (Topic: Art and the City in Renaissance Italy), Core Texts and Ideas 375 (Topic: Art and the City in Renaissance Italy), 375 (Topic 4), European Studies 347 (Topic: Art and the City in Renaissance Italy), 347 (Topic 33), Italian Civilization 349 (Topic: Art and the City in Renaissance Italy), Western Civilization 320 (Topic: Art and the City in Renaissance Italy).

**Topic 34: Berlin.** Same as Comparative Literature 323 (Topic 44), German, Scandinavian, and Dutch Studies 361M, History 362G (Topic 17), and Urban Studies 353 (Topic 7). Three lecture hours a week for one semester. Only one of the following may be counted: Comparative Literature 323 (Topic: Berlin), 323 (Topic 44), European Studies 347 (Topic: Berlin), 347 (Topic 34), German, Scandinavian, and Dutch Studies 360 (Topic: Berlin), 361M, Germanic Civilization 327E (Topic: Berlin), History 362G (Topic: Berlin), 362G (Topic 17), Urban Studies 353 (Topic: Berlin), 353 (Topic 7). Additional prerequisite: Upperdivision standing.

Topic 35: Vikings and Their Literature. Same as Comparative Literature 323 (Topic 43) and German, Scandinavian, and Dutch Studies 341L. Three lecture hours a week for one semester. Only one of the following may be counted: Anthropology 324L (Topic: Vikings and Their Literature), Comparative Literature 323 (Topic: Vikings and Their Literature), 323 (Topic 43), English 322 (Topic: Vikings and Their Literature), European Studies 347 (Topic: Vikings and Their Literature), 347 (Topic 35), 361 (Topic: Vikings and Their Literature), German, Scandinavian, and Dutch Studies 340 (Topic: Vikings and Their Literature), 341L, Germanic Civilization 323E (Topic: Vikings and Their Literature), Scandinavian 323 (Topic: Vikings and Their Literature). Additional prerequisite: Upper-division standing.

### EUS 348. Topics in European Economics, Government, Business, and Policy.

Three lecture hours a week for one semester. Only one of the following may be counted unless the topics vary: European Studies 346, 347, 348, 363. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Governments and Politics of Eastern Europe.** Same as Government 324J and Russian, East European, and Eurasian Studies 335 (Topic 2: Governments and Politics of Eastern Europe). Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 348 (Topic 1), Government 324J, Russian, East European, and Eurasian Studies 335 (Topic 2). Additional prerequisite: Six semester hours of lower-division coursework in government.

**Topic 2: International Trade.** Same as International Business 350. Study of the principles, policies, and problems of the international exchange of goods and investments. Three lecture hours a week for one semester. Only one of the following may be counted: Economics 339K, European Studies 348 (Topic 2), International Business 320F, 350, 350S. Additional prerequisite: Upper-division standing.

**Topic 3: European Environmental Politics.** Same as Government 365N (Topic 20). The history of environmental politics in both the member states of the European Union and the EU itself, including conceptual treatment of general environmental politics and policies, history of European environmentalism, and institutional responses at important 'traditional' and new EU member states. Also examines

EU environmental policies themselves, such as the EU Emissions Trading System, chemicals policy, and GMO policy. Only one of the following may be counted: European Studies 348 (Topic: European Environmental Politics), 348 (Topic 3), Government 365N (Topic: European Environmental Politics), and 365N (Topic 20). Prerequisite: Upper-division standing.

**Topic 4: Comprehensive Notions of European Security.** Same as Government 365N (Topic 21). Examines the conceptual and practical aspects of European comprehensive security via the institutions charged with implementing it: the European Union (EU), the North Atlantic Treaty Organization (NATO), and the Organization for Security and Cooperation in Europe (OSCE). Only one of the following may be counted: European Studies 348 (Topic: Comprehensive Notions of European Security), 348 (Topic 4), Government 365N (Topic: Comprehensive Notions of European Security), 365N (Topic 21). Prerequisite: Upper-division standing.

**Topic 5: The European Union and Regional Integration.** Same as Government 365N (Topic 25). Designed to provide a detailed introduction to the European Union, one of America's major economic and political partners and one of the major actors in contemporary international relations. Only one of the following may be counted: European Studies 348 (Topic: European Union and Regional Integration), 348 (Topic 5), Government 365N (Topic: European Union and Regional Integration), 365N (Topic 25). Additional prerequisite: Upper-division standing.

**Topic 6: Hegel and the Formation of Modern European Identity.** Same as Core Texts and Ideas 335 (Topic 3) and Government 335M (Topic 13). An in-depth study of how Hegel identifies the social conditions necessary for personal self-realization but also for freedom by means of political community. Only one of the following may be counted: Core Texts and Ideas 335 (Topic 3), European 814 (Topic 10), 335 (Topic 3), European Studies 348 (Topic 10), Government 335M (Topic 10), Government 335M (Topic: Hegel and the Formation of Modern European Identity), 348 (Topic 6), Government 335M (Topic 13). Additional prerequisite: Upper-division standing and six semester hours of lower-division coursework in government.

#### EUS 350. Governments and Politics of Western Europe.

Same as Government 324L. Comparative study of peoples, institutions, parties, interest groups, and bureaucracy in the countries of Western Europe, concentrating on the major political systems of Britain, France, Germany, and Italy. Three lecture hours a week for one semester. European Studies 350 and Government 324L may not both be counted. Prerequisite: Six semester hours of lower-division coursework in government.

#### EUS 356. Germany and Europe since 1945.

Restricted to students participating in the summer program in Wuerzburg, Germany. The equivalent of three lecture hours a week for one semester. Prerequisite: Upper-division standing and consent of instructor.

#### EUS 358Q. Supervised Research.

Individual instruction. Prerequisite: Upper-division standing.

#### EUS 362. Independent Research in European Studies.

Tutorially directed research on a modern European topic. Conference course. Required for the concentration in European studies. May be repeated for credit. Prerequisite: Upper-division standing, admission to the European studies program, and consent of instructor.

#### EUS 363. Interdisciplinary Topics in European Studies.

An analysis of various aspects of European culture, science, and technology. Three lecture hours a week for one semester. Only one of

the following may be counted unless the topics vary: European Studies 346, 347, 348, 363. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

#### EUS 375. Capstone Research in European Studies.

Supervised research on a modern European topic chosen in consultation with the student's adviser and culminating in a full-length thesis. Individual instruction. Prerequisite: Upper-division standing, admission to the European studies major, and consent of instructor.

### **Department of French and Italian**

In all French civilization and Italian civilization courses, both lectures and readings are in English. In French 301, lectures are in English and readings are in French. All other courses are conducted primarily in the foreign language.

Students with knowledge of either language must take appropriate steps to determine at which level they may begin work at the University. Students with transfer credit for college work done at another institution may start at the next higher level here. All other students with knowledge of either language are required to take the placement test administered by Student Testing Services (https://testingservices.utexas.edu/sts) for placement in French or the departmentally administered classification test for placement in Italian.

Students are urged to consult departmental advisers about any problem either with placement or with credit by examination.

Students who wish to continue their study of French or Italian may consult departmental advisers about appropriate upper-division courses and prerequisites.

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

### French: FR

#### **Lower-Division Courses**

#### FR 301. French for Graduate Students in Other Departments.

No auditors permitted. Intensive reading course for graduate students, emphasizing basic grammar and vocabulary with translation practice. Three lecture hours a week for one semester. The symbol CR fulfills the foreign language requirement for the Doctor of Philosophy degree in some departments. May not be used to fulfill the foreign language requirement for any bachelor's degree. Offered on the credit/no credit basis only. Prerequisite: Graduate standing.

#### FR 601C. Beginning French.

An intensive beginning course with an emphasis on basic skills: listening, speaking, reading, and writing. Six lecture hours a week for one semester. Only one of the following may be counted: French 601C, 604, 406, 506. Only one of the following may be counted: French 601C, 604, 407, 507, 508K.

#### FR 604. Accelerated First-Year French.

Designed for students of high motivation. A six-hour course comparable to French 506 and 507. Six lecture hours a week for one semester. Only one of the following may be counted: French 601C, 604, 406, 506. Only one of the following may be counted: French 601C, 604, 407, 507, 508K.

#### FR 406, 506. Introductory French I.

Emphasis on basic skills: listening, speaking, reading, and writing at the novice level of proficiency. Designed for students with no prior coursework in French. For each semester hour of credit earned, one lecture hour a week for one semester. Only one of the following may be counted: French 601C, 604, 406, 506.

#### FR 407, 507. Introductory French II.

Emphasis on basic skills: listening, speaking, reading, and writing at the novice to intermediate levels of proficiency. Designed novice level proficiency and prior French coursework. For each semester hour of credit earned, one lecture hour a week for one semester. Only one of the following may be counted: French 601C, 604, 407, 507, 508K. Prerequisite: French 406 with a grade of at least C.

#### FR 508K. Alternate First-Year French II.

An accelerated review of material covered in French 506, followed by study of new material covered in French 507. Five lecture hours a week for one semester. Only one of the following may be counted: French 601C, 604, 407, 507, 508K. Prerequisite: Transfer credit or credit by examination for French 506; or credit for French 506 earned at the University more than one calendar year prior to registering, with a grade of at least C.

#### FR 611C. Intermediate French.

An intensive intermediate course with emphasis on basic skills: listening, speaking, reading, and writing. Does not meet the prerequisite requirements for French 320E or 324L. Six lecture hours a week for one semester. Only one of the following may be counted: French 611C, 612, 312K, 412K. French 611C and 312L may not both be counted. Prerequisite: French 601C, 604, 507, or 508K with a grade of at least C.

#### FR 612. Accelerated Second-Year French: Four Skills.

Designed for students of high motivation. A six-hour course comparable to French 312K and 312L combined. Six lecture hours a week for one semester. French 612 and 312L may not both be counted. Only one of the following may be counted: French 611C, 612, 312K, 412K. Prerequisite: French 604, 507, or 508K with a grade of at least C.

#### FR 312K, 412K. Intermediate French I.

Emphasis on basic skills: listening, speaking, reading, and writing at the Intermediate level of proficiency. Designed for students with Novice level proficiency and a prior beginning French course. For each semester hour of credit earned, one lecture hour a week. Only one of the following may be counted: French 611C, 612, 312K, 412K. Prerequisite: French 407 or 507 with a grade of at least C.

# FR 312L (TCCN: FREN 2312). Second-Year French II: Four Skills.

Listening, speaking, reading, and writing at the advanced, second-year level. Three lecture hours a week for one semester. French 612 and 312L may not both be counted. French 611C and 312L may not both be counted. Prerequisite: French 312K with a grade of at least C.

#### FR 317C. Enhancing French Skills.

Listening, speaking, reading, and writing course designed to provide additional preparation for upper-division French courses. Three lecture hours a week for one semester. Prerequisite: French 312K or 412K or 611C with a grade of at least C.

#### FR 118L. Practice in Spoken French.

Designed to be taken concurrently with French 317C. Two lecture hours a week for one semester. May not be counted toward fulfillment of the

foreign language requirement for any bachelor's degree. Prerequisite: French 611C or 312K with a grade of at least C.

#### FR 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in French.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of French and Italian. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### FR 320E. Advanced French I.

Designed to develop the listening, speaking, reading, and writing skills needed for the analysis of literary and cultural readings in the French-speaking world. Three lecture hours a week for one semester. Prerequisite: French 312L or 317C.

#### FR 120M. Advanced Practice in Spoken French I.

Two lecture hours a week for one semester. May not be counted toward fulfillment of the foreign language requirement for any bachelor's degree. Prerequisite: French 612, 312L, (312N), or 317C with a grade of at least C.

#### FR 120N. Advanced Practice in Spoken French II.

Two lecture hours a week for one semester. May not be counted toward fulfillment of the foreign language requirement for any bachelor's degree. Prerequisite: Completion of at least one upper-division French course, or equivalent proficiency.

#### FR 322E. Advanced French II.

Continuation of French 320E. Designed to develop the listening, speaking, reading, and writing skills needed to analyze literary and cultural readings in the French-speaking world. Three lecture hours a week for one semester. Prerequisite: French 320E.

#### FR 324L. Practical Phonetics.

A thorough review of French phonetics, with emphasis on improving production and understanding of spoken French. Three lecture hours a week for one semester. Prerequisite: French 320E.

#### FR 325C. Crisis and Conflict.

Focus on reading and interpreting texts dealing with historical and social conflicts as manifested in moments of crisis in French or francophone history. Three lecture hours a week for one semester. Prerequisite: French 322E with a grade of at least C.

#### FR 325D. Self and Society.

Focus on reading and interpreting texts involving confrontations between the narrative "I" and representations of various social groups. Three lecture hours a week for one semester. Prerequisite: French 322E.

#### FR 325E. Representing Difference.

Focus on reading and interpreting texts involving representation of difference (gender, religious, cultural, political, economic, social). Three lecture hours a week for one semester. Prerequisite: French 322E.

# FR 326K. Introduction to French Literature I: From the Middle Ages through the Eighteenth Century.

Introduction to the reading and analysis of representative texts, with some attention to cultural and historical background. Three lecture hours a week for one semester. Prerequisite: French 320E.

# FR 326L. Introduction to French Literature II: From the French Revolution to the Present.

Introduction to the reading and analysis of representative texts, with some attention to cultural and historical background. Three lecture hours a week for one semester. Prerequisite: French 320E.

#### FR 327C. French through Cuisine.

A refinement of reading, writing, speaking, and listening skills in French through the context of gastronomy. Three lecture hours a week for one semester. Prerequisite: French 322E.

#### FR 328C. French through Film.

A refinement of reading, writing, speaking, and listening skills in French through the context of French and francophone cinema. Three lecture hours a week for one semester. Prerequisite: French 322E.

#### FR 329C. French through Music.

A refinement of reading, writing, speaking, and listening skills in French through the context of French and francophone music. Three lecture hours a week for one semester. Prerequisite: French 322E.

#### FR 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in French.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of French and Italian. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### FR 130D. French across Disciplines.

Students read and discuss French language materials related to the subject matter of another designated course. One lecture hour a week for one semester. Prerequisite: Upper-division standing and three semester hours of upper-division coursework in French.

#### FR 330K. Studies in French Language and Cultures.

Topics with a focus on language or culture. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: French 322E.

**Topic 2: French Cuisine.** Study of the language of French gastronomy through readings, literature, and film. Explores French society, history, customs, and attitudes in the gourmet culture of French cuisine with particular emphasis on Lyon and its regional specialties. French 330K (Topic: French Cuisine) and 330K (Topic 2) may not both be counted.

#### FR 340C. The Arts in France.

A survey of the major artistic styles, modes, and currents in painting, architecture, sculpture, the decorative arts, and costume, from the medieval through the contemporary periods. Three lecture hours a week for one semester. Prerequisite: French 322E.

#### FR 340P. The Making and Identity of France.

The general political history of France, from the nation's inception to its current existence as part of the European Community. Three lecture hours a week for one semester. Prerequisite: French 322E.

#### FR 340T. France and the Francophone World Today.

An introduction to life in France and francophone regions through the study of contemporary society and culture. Three lecture hours a week for one semester. Prerequisite: French 322E.

#### FR 342C. French for Business.

Development of the ability to function in French in business-related situations, both orally and in writing. Three lecture hours a week for one semester. Prerequisite: French 322E.

#### FR 348. French Drama Workshop.

Intensive analysis of one or several plays or short literary texts, with emphasis on diction, delivery of lines, acting and staging; public performance of one play. Three lecture hours a week for one semester. Prerequisite: French 322E.

#### FR 349P. French Internship.

Provides the opportunity to apply language skills by using French in a professional setting such as a business or agency. Three lecture hours a week for one semester. Prerequisite: French 322E and consent of the department.

#### FR 351C. Topics in French Studies.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: French 325C, 325D, or 325E.

#### FR 358Q. Supervised Research.

Individual instruction. May be repeated for credit. Prerequisite: French 325C, 325D, or 325E; and consent of the department.

#### FR 363L. French Trough the Media.

Focus on how the French language is used today to discuss current and cultural topics in the French media. Three lecture hours a week for one semester. French 359 (Topic: French Through the Media) and 363L may not both be counted. Prerequisite: French 325C, 325D, or 325E.

#### FR 364L. Introduction to French Linguistics.

Introduction to the syntactic, phonological, morphological, lexical, historical, and applied aspects of French linguistics. Three lecture hours a week for one semester. Prerequisite: French 325C, 325D, or 325E.

#### FR 165K, 265K, 365K. Conference Course.

Supervised individual study of selected problems in French language and literature. Prerequisite: French 325C, 325D, or 325E; and consent of instructor.

#### FR 371L. Advanced Written and Oral Composition.

Designed to guide students toward smooth and effective written and oral expression; weekly compositions on assigned topics; periodic oral presentations. Three lecture hours a week for one semester. Prerequisite: French 325C, 325D, or 325E.

#### FR 372. Comparative Stylistics.

Comparison of contemporary French and English syntax and style; study and practice in the technical difficulties of English-to-French and Frenchto-English translation. Three lecture hours a week for one semester. Prerequisite: French 325C, 325D, or 325E.

#### FR 379H. Honors Tutorial Course.

Supervised individual research on a literary, linguistic, or cultural topic, and writing and defense of a thesis under the direction of a committee of two faculty members. Conference course. Prerequisite: Admission to the French Honors Program.

### French Civilization: F C

### **Lower-Division Courses**

#### F C 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in French Civilization.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of French and Italian. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated study program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### F C 320. The French Heritage.

Introduction to French civilization: architecture, painting, music, and social and political history. Given in English; requires no knowledge of French. Three lecture hours a week for one semester. May not be counted toward a major or minor in French. May not be counted toward fulfillment of the foreign language requirement for any bachelor's degree. Prerequisite: Upper-division standing.

#### F C 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in French Civilization.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of French and Italian. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### F C 339. The Development of the French Film.

Films in French, with subtitles in English; lectures in English. Three lecture hours a week for one semester. May not be counted toward fulfillment of the foreign language requirement for any bachelor's degree. English 322 (Topic 20: The Development of the French Film) and French Civilization 339 may not both be counted. Prerequisite: Upper-division standing.

#### F C 340M. Continuity and Change in Modern France.

Same as European Studies 340M. Focuses on various social, political, and cultural crises in France from the revolution of 1789 to the present time. Three lecture hours a week for one semester. European Studies 340M and French Civilization 340M may not both be counted. May not be counted toward fulfillment of the foreign language requirement for any bachelor's degree. Prerequisite: Upper-division standing.

#### F C 341. Topics in French Studies.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

### Italian: ITL

#### **Lower-Division Courses**

#### ITL 601C. Beginning Italian.

An intensive beginning course with an emphasis on basic skills: listening, speaking, reading, and writing. Six lecture hours a week for one semester. Only one of the following may be counted: Italian 601C, 604, 506. Only one of the following may be counted: Italian 601C, 604, 507.

#### ITL 604. Accelerated First-Year Italian.

Designed for students of high motivation. A six-hour course comparable to Italian 506 and 507. Six lecture hours a week for one semester. Only

one of the following may be counted: Italian 601C, 604, 506. Only one of the following may be counted: Italian 601C, 604, 507.

#### ITL 305. Introduction to Italian Language and Culture.

An introductory course in Italian language and culture taught in Castiglion-Fiorentino, Italy. Three lecture hours a week for one semester. May not be counted toward fulfillment of the foreign language requirement for any bachelor's degree. Designed for students studying abroad who wish to receive University credit.

#### ITL 611C. Intermediate Italian.

An intensive intermediate course with an emphasis on basic skills: listening, speaking, reading, and writing. Does not meet the prerequisite requirements for Italian 328, 326K, or 326L. Six lecture hours a week for one semester. Only one of the following may be counted: Italian 611C, 612, 312K. Only one of the following may be counted: Italian 611C, 612, 312L. Prerequisite: Italian 601C, 604, or 507 with a grade of at least C.

#### ITL 612. Accelerated Second-Year Italian.

Comparable to Italian 312K and 312L combined. Intensive work in writing, reading, and speaking at the second-year level. Six lecture hours a week for one semester. Only one of the following may be counted: Italian 611C, 612, 312K. Only one of the following may be counted: Italian 611C, 612, 312L. Prerequisite: Italian 604 or 507 with a grade of at least C.

#### ITL 317C. Enhancing Italian Skills.

Listening, speaking, reading, and writing course designed to provide students who have credit for Italian 611C with additional preparation for upper-division Italian courses. Three lecture hours a week for one semester. Prerequisite: Italian 611C with a grade of at least C.

#### ITL 118K. Practice in Spoken Italian I.

Designed to be taken concurrently with Italian 312K. Two lecture hours a week for one semester. May not be counted toward fulfillment of the foreign language requirement for any bachelor's degree. Prerequisite: Italian 604 or 507 with a grade of at least C.

#### ITL 118L. Practice in Spoken Italian II.

Designed to be taken concurrently with Italian 312L. Two lecture hours a week for one semester. May not be counted toward fulfillment of the foreign language requirement for any bachelor's degree. Prerequisite: Italian 611C or 312K with a grade of at least C.

#### ITL 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Italian.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of French and Italian. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### **Upper-Division Courses**

#### ITL 320. Advanced Italian.

Designed to develop the listening, speaking, reading, and writing skills needed for the analysis of literary and cultural readings in Italian. Three lecture hours a week for one semester. Prerequisite: Italian 611C or 312L with a grade of at least C.

#### ITL 321. Introduction to Italian Literature.

Reading and analysis of literature, literary criticism, textual analysis. Three lecture hours a week for one semester. Italian 321 and 326K may not both be counted. Italian 321 and 326L may not both be counted. Prerequisite: Italian 320 or 328 with a grade of at least C.

#### ITL 322L. Tradition and Change in Contemporary Italy.

An analysis of Italy's trends and of conflicting values in its political, economic, and social development. Three lecture hours a week for one semester. Prerequisite: Three semester hours of upper-division coursework in Italian.

#### ITL 325C. Italian Through Cinema.

Designed to enrich knowledge of Italian language and culture through screening and discussion of Italian films. Three lecture hours a week for one semester. Prerequisite: Italian 320 or 328 with a grade of at least C.

#### ITL 328. Composition and Conversation.

Focuses on idioms, grammar, syntax, and style. Three lecture hours a week for one semester. Prerequisite: Italian 320 with a grade of at least C.

#### ITL 329. Advanced Composition and Conversation.

Advanced work in writing and speech, based on current events and contemporary readings. Three lecture hours a week for one semester. Prerequisite: Italian 320 or 328 with a grade of at least C.

# ITL 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Italian.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of French and Italian. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### ITL 330. Topics in Italian Studies.

Analysis of Italian culture. Texts include literature, film, popular culture, and other forms. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Italian 320 or Italian 328 with a grade of at least C.

#### ITL 130D. Italian across Disciplines.

Students read and discuss Italian language materials related to the subject matter of another designated course. One lecture hour a week for one semester. Prerequisite: Upper-division standing, three semester hours of upper-division coursework in Italian, and consent of instructor.

#### ITL 332. Italian Translation Workshop.

Focuses on the practical aspects of translation as a means to expand students' resources by practicing and improving grammar, style and lexicon. Three lecture hours a week for one semester. Italian 330K (Topic: Italian Translation Workshop) and 332 may not both be counted. Prerequisite: Italian 320 or 328 with a grade of at least C.

#### ITL 347. Italian Popular Cinema.

Analysis of Italian genre films (melodrama, comedy, horror, western, action), in their cultural and historical contexts. Three lecture hours a week for one semester. Italian 331 (Topic: Italian Popular Cinema) and 347 may not both be counted. Prerequisite: Italian 320 or 328 with a grade of at least C.

#### ITL 348. Italian Drama Workshop.

Intensive analysis of one or several plays or short literary texts, with emphasis on diction, delivery of lines, and acting and staging. Three

lecture hours a week for one semester. Prerequisite: Italian 320 or 328 with a grade of at least C.

#### ITL 349P. Italian Internship.

Three lecture hours a week for one semester. Prerequisite: Italian 320 or 328 with a grade of at least C and consent of the department.

#### ITL 358Q. Supervised Research.

Individual instruction. May be repeated for credit. Prerequisite: Italian 320 or 328 with a grade of at least C and consent of the department.

# ITL 365. Conference Course in Italian Language and Literature.

Course content varies according to needs of students; designed to fill in gaps and give students a good overall picture of the development of Italian literature. Conference course. Prerequisite: Upper-division standing and consent of the undergraduate adviser or the chair. Italian majors may take conference courses only in exceptional cases.

#### ITL 375. Studies in Italian Literature.

Intensive examination of a period or a major writer. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Six upper-division hours of Italian coursework.

Topic 1: Writing Fascism: Writing the Resistance. Examines major novels dealing with the Italian narrative on World War II and the resistance. Italian 375 (Topic: Writing Fascism: Writing the Resistance) and 375 (Topic 1) may not both be counted. Topic 2: The Anti-hero in the Twentieth-Century Italian Novel. Only one of the following may be counted: European Studies 347 (Topic: Antihero in Twentieth-Century Italian Novel), Italian 375 (Topic: Antihero in Twentieth-Century Italian Novel), 375 (Topic 2). Topic 3: Sicily in Literature and Film. An examination of Sicilian culture through novels and films. Only one of the following may be counted: European Studies 347 (Topic: Sicily in Literature and Film), Italian 375 (Topic: Sicily in Literature and Film), 375 (Topic 3). Topic 4: Neorealism and its Legacy. An analysis of the legacy of neorealism in Italian literature and cinema from approximately from the late 1940s to the early 1950s. Italian 375 (Topic: Neorealism and its Legacy) and 375 (Topic 4) may not both be counted.

#### ITL 379H. Honors Tutorial Course.

Supervised individual research on a literary, linguistic, or cultural topic, and writing and defense of a thesis under the direction of a committee of two faculty members. Conference course. Prerequisite: Admission to the Italian Honors Program.

### **Italian Civilization: ITC**

### **Lower-Division Courses**

#### ITC 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Italian Civilization.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of French and Italian. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### ITC 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Italian Civilization.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study

Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of French and Italian. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### ITC 330. Topics in Italian Studies.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

#### ITC 337. Italian Masterpieces.

Study of representative texts in visual arts, film, literature, and opera, from the Renaissance to the present, in their historical context. Three lecture hours a week for one semester. Only one of the following may be counted: Core Texts and Ideas 375 (Topic: Italian Masterpieces: Literature/Film/Art), European Studies 347 (Topic: Italian Masterpieces: Literature/Film/Art), Italian Civilization 337, 349 (Topic: Italian Masterpieces: Literature/Film/Art). Prerequisite: Upper-division standing.

#### ITC 338. Italian Television Advertising.

Analysis of Italian television commercials in order to identify changes that have taken place at the level of language, with some attention to socio-cultural dynamics. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 347 (Topic: ITL TV ADS: FASHION/FOOD/CARS), Italian Civilization 338, 349 (Topic: ITL TV ADS: FASHION/FOOD/CARS), Women's and Gender Studies 340 (Topic: ITL TV ADS: FASHION/FOOD/CARS). Prerequisite: Upper-division standing.

#### ITC 339. Italian Cinema.

Three lecture hours a week for one semester. Only one of the following may be counted: English 322 (Topic 22: Italian Cinema), Italian Civilization 339, 349 (Topic 1). Prerequisite: Upper-division standing.

#### ITC 348. Dante.

Same as English 366D and European Studies 347 (Topic 23). Three lecture hours a week for one semester. Only one of the following may be counted: English 322 (Topic 23), 366D, European Studies 347 (Topic: Dante), 347 (Topic 23), Italian Civilization 348, 349 (Topic 2). Prerequisite: Upper-division standing.

#### ITC 360. Italian Civilization.

Same as European Studies 347 (Topic 1: Italian Civilization). Survey of the social, political, and cultural history of Italy. Taught in English. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 347 (Topic 1), Italian Civilization 360. With consent of the undergraduate adviser in the Department of French and Italian, may be counted toward a major in Italian. Prerequisite: Upper-division standing.

# Department of Geography and the Environment

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

### **Geography: GRG**

#### **Lower-Division Courses**

#### GRG 301C, 401C. The Natural Environment.

An introduction to the study of the Earth from a holistic perspective including geologic, atmospheric, ecological, and water sciences and its relevance to present-day environmental problems. Three lecture hours and one-and-one-half laboratory hours a week for one semester.

#### GRG 301K (TCCN: GEOL 1347). Weather and Climate.

A survey of meteorological phenomena and climatological processes of the earth. Three lecture hours a week for one semester.

#### GRG 302P. Topics in Cultural Geography.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### GRG 303P. Topics in Physical Geography.

Three lecture hours or two lecture hours and one discussion hour a week for one semester. Additional hours may be required for some topics. Only one of the following may be counted unless the topics vary: Geography 303P, 304P, 309. May be repeated for credit when the topics vary.

#### GRG 304E, 404E. Environmental Science: A Changing World.

Surveys the major global environmental concerns affecting the Earth and its residents from the perspectives of the environmental sciences. Three lecture hours and one-and-one-half laboratory hours a week for one semester.

#### GRG 304P. Topics in Geographical Methods.

Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted unless the topics vary: Geography 303P, 304P, 309. May be repeated for credit when the topics vary.

### GRG 305 (TCCN: GEOG 1303). This Human World: An Introduction to Geography.

Introductory survey of human geography, including human-environment relations, cultural patterns and processes, and geography's relation to other fields of study. Three lecture hours and one laboratory hour a week for one semester.

#### GRG 306C. Conservation.

Introduction to environmental management, with emphasis on the major causes and consequences of environmental degradation. The course is organized around the premise that people cannot solve environmental problems unless they know how and why they occur; a major objective is to identify and understand the sociocultural forces that drive environmental degradation. Three lecture hours a week for one semester.

#### GRG 307C. Introduction to Urban Studies.

Same as Urban Studies 301. A multidisciplinary study of cities and complex urban environments; historical and contemporary issues from both national and international perspectives. Three lecture hours a week for one semester.

#### GRG 309. Topics in Human Geography.

Three lecture hours a week for one semester. Only one of the following may be counted unless the topics vary: Geography 303P, 304P, 309. May be repeated for credit when the topics vary.

#### GRG 309C. Creating the Sustainable Society.

Same as Sociology 309C. Overview of sustainability as something human beings must strive to create in an era of global warming and ever

greater social inequalities, both between and within countries. Three lecture hours a week for one semester. Only one of the following may be counted: Geography 302P (Topic: Creating Sustainable Societies), 309C, Sociology 304 (Topic: Creating Sustainable Societies), 309C.

#### GRG 310C, 410C. Spatial Data and Analysis.

Fundamental concepts in spatial data acquisition, analysis, and presentation, with emphasis on the needs of professionals in cartography, geographic information systems (GIS), and remote sensing. Three lecture hours and one-and-one-half laboratory hours a week for one semester.

#### GRG 319. Geography of Latin America.

Same as Latin American Studies 319. Adaptations to population growth and spatial integration in cultural landscapes of great natural and ethnic diversity; problems of frontiers and cities. Three lecture hours a week for one semester.

#### GRG 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Geography.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Geography and the Environment. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### GRG 320K. Land and Life: The American Southwest.

Historical geography of the southwestern United States, emphasizing the ways of life of American Indian, Spanish, mestizo, and Anglo cultures. Three lecture hours a week for one semester, with one field trip to be arranged. Prerequisite: Upper-division standing.

# GRG 323K. South America: Nature, Society and Sustainability.

Same as Latin American Studies 330 (Topic 3). Field study of environmental and social change in selected landscapes in South America, such as protected areas; places of food production; transportation routes; migrant landscapes; urban areas; sites of cultural and historical importance; and issues of human rights. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### GRG 325. Geography of Texas.

Texas as an environmental and cultural borderland: as a transition zone between plains and mountains, humid and arid, South and West, Anglo-America and Latin America. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### GRG 326. Regions and Cultures of Europe.

Same as European Studies 346 (Topic 19) and Russian, East European, and Eurasian Studies 345 (Topic 2). Spatial patterns in Europe, with emphasis on cultural, historical, and political geography. Only one of the following may be counted: European Studies 346 (Topic: Regions and Cultures of Europe), 346 (Topic 19), Geography 326, Russian, East European, and Eurasian Studies 345 (Topic 2). Prerequisite: Upper-division standing.

#### GRG 327. Geography of the Former Soviet Union.

Same as Russian, East European, and Eurasian Studies 345 (Topic 4: Geography of the Former Soviet Union). A systematic introduction to cultural, physical, political, and economic geography of the former Soviet Union. Focus on the fundamental transformation that the former Socialist Union Republics, now sovereign states, have undergone since 1991. Three lecture hours a week for one semester. Prerequisite: Upperdivision standing.

# GRG 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Geography.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Geography and the Environment. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

# GRG 330F. Geographies of International Development in Africa.

Same as African and African Diaspora Studies 372F (Topic 1). Critically examines the major approaches to "Development" in colonial and postcolonial eras, with a focus on a range of African resources: from water to wildlife, forests to farms, airways to rangelands, and including a consideration of African bodies themselves as sites of development and resistance. Only one of the following may be counted: African and African Diaspora Studies 372F (Topic: INTL DEVELOPMENT IN AFRICA), 372F (Topic 1), Geography 330F, 356T (Topic: INTL DEVELOPMENT IN AFRICA), 356T (Topic 10). Prerequisite: Upper-division standing.

#### GRG 330W. Water and Watersheds.

Exposure to numerical analyses techniques developed by hydrologists and to fundamental equations controlling water transfer over and through earth materials. Learn how to administer hydrologic applications to practical problems in physical geography, geology, civil engineering, ecology, and environmental sciences. Three lecture hours a week for one semester Geography 330W and 356 (Topic: Water and Watersheds) may not both be counted. Prerequisite: Upper-division standing and Geography 301C.

#### GRG 331K. Nature, Society, and Adaptation.

Same as Anthropology 324L (Topic 17: Cultural Ecology). Long term trajectories of change in human environment relationships, including issues of human evolution and human nature, violence, population, food, agriculture, urbanization, globalizing modernization, and environmental impacts; issues of sustainability, cultural survival, human rights, and environmental protection. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### GRG 333C. Severe and Unusual Weather.

A continuation of Geography 301K, focuses on atmospheric hazards such as severe thunderstorms and their offspring (hail, lightning, tornadoes, damaging winds and flash floods) as well as tropical cyclones. Covers human risk perception in relation to atmospheric hazards. Three lecture hours a week for one semester, with additional field hours to be arranged. Prerequisite: Geography 301K.

#### GRG 333K. Climate Change.

Examines changes in climatic systems over both short and long time periods in relation to impacts on physical and ecological systems. Discusses past, present, and future changes in climatic conditions and the methods used to make those evaluations. Three lecture hours a week for one semester. Geography 333K and 356T (Topic: Climate Change) may not both be counted. Prerequisite: Upper-division standing and Geography 301C or 301K.

#### GRG 334. Conservation, Resources, and Technology.

Analysis of the relationship between the human population and its resource base, with particular emphasis on current problems in environmental resource management. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### GRG 334K. Soils.

Morphology, genesis, properties, and distribution of world soils. Factors of soil formation. Three lecture hours a week for one semester. Prerequisite: Upper-division standing; and six semester hours of coursework in physical geography or one or more of the geological or natural sciences, or the equivalent.

#### GRG 334L. Vulnerability to Natural Hazards.

Same as Latin American Studies 330 (Topic 5). An interdisciplinary approach, set right at the nexus of both physical and human geography, to studying the types of natural disasters that occur throughout Earth with a focus on tropical areas. Explore a region's susceptibility to natural disasters by studying the physical phenomena that incite specific hazards so that their spatial distribution can be outlined. Utilize theoretical frameworks that can expose the social causes of human vulnerability, the political repercussions of disasters, and how disaster response varies from country to country depending on varying political stances and economic conditions. Three lecture hours a week for one semester. Only one of the following may be counted: Geography 334C, 334L, Latin American Studies 330 (Topic: Environment Hazards Latin America/Caribbean), 330 (Topic 5). Prerequisite: Upper-division standing.

#### GRG 335C. Quaternary Landscapes.

Changing physical and biotic landscapes on the Ice Age earth during the last two million years. Reconstruction of Quaternary geomorphic landscapes based on principles and applications of geochronology and paleoclimatology. Three lecture hours a week for one semester. Geography 335C and 385C may not both be counted. Prerequisite: Upperdivision standing and Geography 301C.

#### GRG 335D. Anthropocene.

Evaluates the role of humans in changing Earth systems. Examines the evidence used to reconstruct past environments, to decipher the ecological and biogeographical consequences of land use, to measure altered surface processes, to distinguish the anthropogenic contribution to climate change, and to predict likely future scenarios. Explores the interaction of human history with altered biophysical patterns and processes. Assesses the recognition of the Anthropocene as a potential new epoch in Earth history, including the implications of that recognition for environmental stewardship. Three lecture hours a week for one semester. Geography 335D and 356T (Topic: Anthropocene) may not both be counted. Offered on the letter-grade basis only. Prerequisite: Upper-division standing, and three semester hours of coursework in physical geography or one of the geological or natural sciences.

#### GRG 335K. Mountain Geoecology.

Geological evolution of mountains. Physical geography of mountains: climates, soils, vegetation, landforms and geomorphic processes. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and six semester hours of coursework in physical geography or one or more of the geological or natural sciences.

#### GRG 335N. Landscape Ecology.

The study of spatial patterns in the earth's biosphere found within landscapes, typically areas measured in square kilometers. Examines the processes that create those patterns, drawing from ecology, biogeography, and many other disciplines. Also explores the practical applications of landscape ecology to the study of natural environments and those managed or altered by human activities. Three lecture hours a week for one semester. Geography 335N and 356T (Topic: Landscape Ecology) may not both be counted. Prerequisite: Upper-division standing and three semester hours of coursework in physical geography or one of the geological or natural sciences.

#### GRG 336. Contemporary Cultural Geography.

Same as Urban Studies 354 (Topic 8). Recent theoretical developments in cultural geography, with a focus on landscapes and the everyday practices that imbue them with meaning; the ways those meanings are contested and are the foci of struggle; and how the relationship between culture and space plays a central role in the social construction of identity. Three lecture hours a week for one semester. Only one of the following may be counted: Geography 336, Urban Studies 354 (Topic: Contemporary Cultural Geography), 354 (Topic 8). Prerequisite: Upperdivision standing.

#### GRG 336C. National Parks and Protected Areas.

Introduces current conservation principles and management strategies; outlines the challenges, changes, and dilemmas associated with protected areas. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### GRG 337. The Modern American City.

Same as Architecture 350R (Topic 1: The Modern American City) and Urban Studies 352 (Topic 1: The Modern American City). Issues facing residents of United States cities, such as transportation and housing, poverty and crime, metropolitan finance, environmental and architectural design; historical/comparative urban evolution. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### GRG 338C. Rivers and Landscapes: Fluvial Geomorphology.

Drainage basin evolution and channel adjustment, variability of river systems in differing geomorphic regimes, relationships between fluvial systems and other components of physical geography, and the role of humans as geomorphic agents. Three lecture hours a week for one semester, with additional field hours to be arranged. Prerequisite: Upperdivision standing; and Geography 301C or Geological Sciences 401, or the equivalent.

#### GRG 339. Process Geomorphology.

Analysis of geomorphic processes and their effects on landform development. Three lecture hours a week for one semester. Prerequisite: Upper-division standing, and credit or registration for Geography 301C or Geological Sciences 401.

### GRG 339K. Environment, Development, and Food Production.

Assessment of various types of agriculture with regard to environmental factors and management techniques. Three lecture hours a week for one semester. Geography 339K and 390S may not both be counted. Prerequisite: Upper-division standing.

### GRG 340D. Political Ecology of Globalization and Environmental Degradation.

Study of current environmental problems from the perspective of political ecology, which critically examines political, economic, and social relations between humans and the natural world. Uses case studies from Africa, Latin America, Asia, and the Middle East to address climate change, deforestation, desertification, biodiversity, and environmental justice. Three lecture hours a week for one semester. Prerequisite: Upperdivision standing.

#### GRG 440L. Landuse/Landcover Change Practicum.

Focuses on best practices for classifying and mapping land use and land cover, as well as how they change over time in an experiential learning

environment. Develop testable hypotheses answered by the original data analysis and interpretation. Two lecture hours and three laboratory hours a week for one semester. Geography 440L and 356T (Topic: Landuse/ Landcover Change Practicum) may not both be counted. Prerequisite: Geography 460G.

#### GRG 340U. Internship and Service Learning.

Same as Urban Studies 360. Internship experience in an urban studiesrelated public or nonprofit agency. The opportunity to apply the knowledge, theory, and understanding gained from courses in areas of specialization to urban issues in a professional setting. Includes an academic service-learning component. Approximately five to ten hours a week for one semester. Only one of the following may be counted: Geography 340U, 356T (DIRECTED INTRNSHPS IN URB STDS), Urban Studies 360. Prerequisite: Upper-division standing; and Urban Studies 301 and 315.

#### GRG 341K. Landscapes of Mexico and Caribbean America.

Same as Latin American Studies 330 (Topic 2: Landscapes of Mexico and Caribbean America). The natural regions and cultural landscapes of Mexico, Central America, and the West Indies. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### GRG 342C. Sustainable Development.

Historical and contemporary analysis of international development with a focus on the prospects for environmental sustainability. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### GRG 344K. Global Food, Farming, and Hunger.

Examination of contemporary transformations in global agro-food systems, with emphasis on the current paradox of epidemic obesity in some parts of the world and enduring hunger in others. Three lecture hours a week for one semester. Geography 344K and 356T (Topic: Farming, Food, and Global Hunger) may not both be counted. Prerequisite: Upper-division standing.

#### GRG 346. The Human Use of the Earth.

The state of the world from an ecological perspective. Case studies are drawn from a wide range of ecological settings and involve both traditional and modern societies. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### GRG 350E. Geoprocessing.

Computer programming and scripting applied to geospatial data. Three lecture hours a week for one semester. Geography 350E and 356T (Topic: Geoprocessing) may not both be counted. Offered on the letter-grade basis only. Prerequisite: Geography 460; and Geography 470 and/or Introductory Computer Science course are recommended.

#### GRG 350K. Geographies of Globalization.

Examines globalization in historical and contemporary contexts, with a focus on race, class and gendered power. Three lecture hours a week for one semester. Geography 350K and 356T (Topic: Introduction to Globalization) may not both be counted.

#### GRG 356. Topics in Environmental Geography.

Topics include environmental assessment methods and techniques, the conservation movement, and climate and people. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 1: Children's Environmental Health**. Contemporary issues in environmental health, with an emphasis on how modern environmental issues directly affect children. Focuses on the decisionmaking process and the larger concept of environmental ethics. Examines the relationship between humans and nature, and the concepts of sustainability, resilience, and global health. Geography 356 (Topic: Children's Environmental Health) and 356 (Topic 1) may not both be counted.

#### GRG 356C. Geo-Archaeology and Environmental History.

Long-term ecology as reconstructed from settlement and land-use histories. Empirical case studies in environmental history from the Mediterranean region, the Near East, and Mesoamerica. Applications to degradation, desertification, sustainability, and global change. Three lecture hours a week for one semester. Only one of the following may be counted: Anthropology 382N, Geography 356C, 382K. Prerequisite: Upper-division standing.

#### GRG 356T. Topics in Geography.

Three lecture hours a week for one semester. Some topics may require additional field trips. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: The Culture of Cities.** Same as American Studies 370 (Topic 13) and Urban Studies 354 (Topic 4). Examines the social, geographical, and cultural evolution of the United States from a rural and small-town society to an urban and suburban nation. Subjects may include the segregation of public and private space; the formation of urban subcultures organized by gender, work, race, religion, and sexuality; social and spatial divisions between rich and poor and native-born and immigrant; and the increasing importance of "cultural capital" in reshaping urban politics and in conflicts over revitalization and gentrification. Additional prerequisite: Upper-division standing.

**Topic 2: Memory and Place.** Same as American Studies 370 (Topic 23). Explores how cultural memory is produced in its various forms, from memorials, public art, and commodities to popular culture, rituals, and museums, and how public remembering is inevitably anchored in specific geographic places. Additional prerequisite: Upper-division standing.

Topic 3: Geographical Information Systems and Remote Sensing for Archaeology and Paleontology. Same as Anthropology 324L (Topic 33). Designed to give students interested in the fields of archaeology, physical anthropology, and paleontology a foundation in the use of geographical information systems (GIS) and the analysis of remotely sensed data from satellites and aerial photographs. Additional prerequisite: Upper-division standing.

**Topic 4: Northern Lands and Cultures.** Same as European Studies 346 (Topic 9) and Russian, East European, and Eurasian Studies 345 (Topic 6). Develops geographical understanding of the Circumpolar region of the North, an ancient human habitat, home to distinct millennia-old civilizations. Only one of the following may be counted: European Studies 346 (Topic: Northern Lands and Cultures), 346 (Topic 9), Geography 356T (Topic: Northern Lands and Cultures), 356T (Topic 4), Russian, East European, and Eurasian Studies 345 (Topic: Northern Lands and Cultures), 345 (Topic 6). Additional prerequisite: Upper-division standing.

**Topic 5: Urban Publics.** The concept of the public in the city and how it has shifted over time along the lines of gender, ethnicity, race, and class. Examines contemporary struggles over defining the urban public and how those struggles are linked to social, cultural, political, and economic forces. Subjects include uses of public space, the public sphere, eminent domain, urban politics, civic engagement, and political participation. Only one of the following may be counted: Geography 356T (Topic: Urban Publics), 356T (Topic 5), Urban Studies 354 (Topic: Urban Publics). Prerequisite: Upper-division standing. **Topic 6: The Environmental Change and Management of Large Rivers.** An interdisciplinary perspective on the physical processes of large rivers. Subjects include land degradation; deforestation;

river engineering; flood processes; sedimentology; floodplains management; ecohydrology; Quaternary fluvial geomorphology; and paleohydrology. Only one of the following may be counted: Geography 356T (Topic: Environmental Change and Management of Large Rivers), 356T (Topic 6), Latin American Studies 330 (Topic: Environmental Change and Management of Large Rivers). Prerequisite: Upper-division standing.

**Topic 7: The Geography Of Media.** Explores the media from a geographical perspective. Geography 356T (Topic: Geography of Media) and 356T (Topic 7) may not both be counted. Prerequisite: Upper-division standing.

**Topic 8: Global Societies.** The use of geographical perspectives to make sense of the global society. Subjects include globalization, war, economic crisis, and social movements. Geography 356T (Topic: Global Societies) and 356T (Topic 8) may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 9: Human Health and the Environment.** Same as Urban Studies 350 (Topic 2). Study of how environmental issues directly impact human lives, including the developing and developed worlds, current conditions and future trends, and environmental degradation. Only one of the following may be counted: Geography 356T (Topic: Human Health and the Environment), 356T (Topic 9), Urban Studies 350 (Topic: Human Health and the Environment), 350 (Topic 2). Additional prerequisite: Upper-division standing.

**Topic 11: Gender and Geography.** Same as Women's and Gender Studies 340 (Topic 36). Interrogates how norms of gender, race, and sexuality are created through and across the spaces of the body, home, nation, colony and the globe, using a feminist postcolonial lens. Only one of the following may be counted: Geography 356T (Topic: Gender and Geography), 356T (Topic 11), Women and Gender Studies 340 (Topic: Gender and Geography), 340 (Topic 36) Additional prerequisite: Upper-division standing.

**Topic 12: Mapping Latin America.** Same as History 363K (Topic 4) and Latin American Studies 330 (Topic 4). Discuss the role of maps in the creation of Latin America as a specific sort of place. As such, allows familiarity with a broad overview of Latin American history from Pre-Columbian civilizations to the modern period. Only one of the following may be counted: Geography 356T (Topic: Mapping Latin America), 356T (Topic 12), History 363K (Topic: Mapping Latin America), 363K (Topic 4), Latin American Studies 330 (Topic: Mapping Latin America), 330 (Topic 4). Additional prerequisite: Upper-division standing.

**Topic 14: Geography of Religion in Eastern Europe and Russia.** Same as Religious Studies 357 (Topic 5) and Russian, East European, and Eurasian Studies 345 (Topic 9). A comprehensive overview of major religious culture regions in the former Eastern bloc countries. Only one of the following may be counted: Geography 356T (Topic: Geography of Religion in Eastern Europe and Russia), 356T (Topic 14); Religious Studies 357 (Topic 5); Russian, East European, and Eurasian Studies 345 (Topic: Geography of Religion in Eastern Europe and Russia), 357 (Topic 5); Russian, East European, and Eurasian Studies 345 (Topic: Geography of Religion in Eastern Europe and Russia), 345 (Topic: 9). Additional prerequisite: Upper-division standing.

#### GRG 357. Medical Geography.

The geographic distribution, expansion, and contraction of the infectious diseases that have the greatest influence in shaping human societies today: malaria, AIDS, and others. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### GRG 358E. Geography and Religion.

Same as Humanities 350 (Topic 3). Ideas about the relationships among the natural world, myth, and ritual; principal focus on Christianity, Islam, and Judaism and their offshoots and antagonists in the Western world.

Geography 358E and Humanities 350 (Topic 3) may not both be counted. Prerequisite: Upper-division standing.

#### GRG 460C. The Geographer's Craft.

A comprehensive introductory survey of research techniques used in contemporary geography. The course uses the problem-solving approach to teach technical skills and concepts drawn from cartography, remote sensing, geographical information systems, spatial statistics, and maps and map interpretation. Three lecture hours and one and one-half laboratory hours a week for one semester.

#### GRG 460G. Environmental Geographic Information Systems.

An introduction to the creation and use of geographic information systems. Three lecture hours and two lab hours a week for one semester. Prerequisite: Upper-division standing.

#### GRG 360L. Spatial Analysis.

Application of statistical techniques to spatial problems: research and experimental design, hypothesis testing and sampling, with reference to spatial patterns and areal associations. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

### GRG 462K. Introduction to Remote Sensing of the Environment.

The use of electromagnetic energy to sense objects in the natural environment; interpretation and recognition of patterns detected by sensors. Three lecture hours and one and one-half laboratory hours a week for one semester. Prerequisite: Upper-division standing.

#### GRG 464K. Advanced Remote Sensing and Pattern Analysis.

Advanced classification techniques for satellite image processing and landscape pattern analysis. Three lecture hours and onehalf discussion hours a week for one semester. Geography 356 (Topic: Advanced Remote Sensing and Pattern Analysis) and 464K may not both be counted. Prerequisite: Upper-division standing, and Geography 462K or the equivalent or consent of instructor.

#### GRG 366C. Comparative Ecosystems.

The important ecosystem processes that affect the distributions, characteristics, and management of natural environments at landscape, regional, and continental scales. Ecosystem functions, including nutrient cycling, water balance, and the role of natural disturbances in a wide range of ecosystems, from the tundra to the rain forests and grasslands of the tropics. Three lecture hours a week for one semester. Geography 356T (Topic: Comparative Ecosystems) and 366C may not both be counted. Prerequisite: Upper-division standing and three semester hours of coursework in physical geography or one of the geological or natural sciences.

#### GRG 366K. Biogeography.

Contemporary patterns of plant and animal distribution, and the environmental and historical processes affecting them. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and three semester hours of coursework in physical geography or one of the geological or natural sciences.

# GRG 367D. Climate Change and Vegetation Response in the Kalahari.

Using the Kalahari as a basis for understanding, explore the ecological dynamics of savanna systems and their interactions with climatic variability over time and space. The focus on monitoring and assessment to inform rangeland management includes vegetation sampling and calculations of carrying capacity. Examine how savanna systems dynamics are comparable across regions, and thus are both globally and UT-locally relevant. The equivalent of three lecture hours a week for

one semester. Geography 356T (Topic: Climate Change and Vegetation Response in the Kalahari) and 367D may not both be counted. Offered on the letter-grade basis only. Prerequisite: GPA of at least 2.0.

#### GRG 367K. Vegetation Ecology.

Plant autecology and synecology. Ecological factors and processes of plant communities. Vegetation geoecology, succession, and dynamics. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and six semester hours of coursework in physical geography or one or more of the geological or natural sciences.

# GRG 368C. Spatial Analysis and Geographic Information Systems.

Addresses spatial problem solving by focusing on both the theoretical/ conceptual and practical aspects of geographic information systems modeling. Describes geographic information systems techniques and spatial statistics used to quantify and measure spatial patterns. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and Geography 360G.

#### GRG 368D. Enviro-Cultural Dynamics in Botswana.

Examines the Kalahari case study of the San "First People" and their history of treatment in the Central Kalahari Game Reserve compared to other more recently arriving peoples. Explores how cultural groups are differentially treated and how that treatment and their ties to and uses of the landscape evolves over time. The equivalent of three lecture hours a week for one semester. Geography 356T (Topic: Enviro-Cultural Dynamics in Botswana) and 368D may not both be counted. Offered on the lettergrade basis only. Prerequisite: GPA of at least 2.0.

# GRG 369D. GIS Applications in Social and Environmental Science.

A hands-on approach to covering the appropriate use of geographical information systems (GIS) and spatial statistical analysis in different sub-disciplines. Three lecture hours a week for one semester. Geography 356 (Topic: GIS Applications in Social and Environmental Science) and 369D may not both be counted. Offered on the letter-grade basis only. Prerequisite: Geography 460G.

#### GRG 470C. Advanced Geographic Information Systems.

Study of methods of spatial analysis, design and implementation of a geographic information system, vector and raster modeling, and advanced applications of geographic information systems. Three lecture hours and one and one-half laboratory hours a week for one semester. Prerequisite: Geography 360G and consent of instructor.

#### GRG 373F. Field Techniques.

Introduction to the collection and mapping of environmental and cultural data, involving both classroom lectures and outdoor exercises. Three lecture hours a week for one semester. Prerequisite: Upper-division standing, a major in geography, and consent of instructor.

#### GRG 373K. Field Methods for Landscape Characterization.

The design of research questions and the acquisition of data for the characterization of landscapes. Utilizes geographical and ecological field-based methods. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and Geography 301C or the equivalent.

#### GRG 374. Frontiers in Geography.

Restricted to geography majors and students seeking a secondary school teaching certificate with geography as the second teaching field. Current concerns and methodology in the field of geography; an introduction to theory and research in geography. The equivalent of three lecture hours a week for one semester, with one field trip to be arranged. Prerequisite: Upper-division standing and consent of the undergraduate adviser.

#### GRG 476T. Topics in Geography.

Three lecture hours and one and one-half laboratory hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

#### GRG 679H. Honors Tutorial Course.

For honors candidates in geography. Individual reading of selected works for one semester, followed in the second semester by the writing of an honors thesis. Regular conferences with the faculty supervisor are also required. Conference course for two semesters. Prerequisite: For 679HA, admission to the Geography Honors Program no later than two semesters before expected graduation; for 679HB, Geography 679HA. A University grade point average of at least 3.00 and a grade point average in geography of at least 3.50 are required for admission to the Geography Honors Program.

#### GRG 379K. Conference Course.

Supervised individual study of selected problems in geography. Conference course. May be repeated for credit. Prerequisite: Six semester hours of upper-division coursework in one or more of the social, geological, or natural sciences; and consent of instructor.

#### GRG 379L. Practicum: Internships in Applied Geography.

Research and staff experience working in an appropriate government agency or private business. At least six but no more than nine hours of work a week for one semester. Prerequisite: Completion of at least seventy semester hours of coursework, including twelve semester hours of geography, and consent of the undergraduate adviser.

### Sustainability Studies: SUS

### **Lower-Division Courses**

#### **Upper-Division Courses**

#### SUS 374. Capstone Experience in Sustainability Studies.

Work independently to complete a research project that assembles and integrates knowledge and skills acquired across your university career. Current concerns and methodology in the field of Sustainability Studies; an introduction to theory and research in Sustainability topics. Three lecture hours a week and a minimum of seventy hours of field research work for one semester. Prerequisite: Upper-division standing and consent of undergraduate advisor.

#### SUS 379L. Directed Internships in Sustainability.

Experience working in an appropriate government agency, nongovernmental organization, or private business. Three lecture hours a week and a minimum of seventy hours of internship work for one semester. Prerequisite: Upper division standing, completion of at least seventy semester hours of coursework, including twelve semester hours of sustainability studies, and consent of the undergraduate adviser.

### **Urban Studies: URB**

### **Lower-Division Courses**

#### URB 301. Introduction to Urban Studies.

Same as Geography 307C. A multidisciplinary study of cities and complex urban environments; historical and contemporary issues from both national and international perspectives. Three lecture hours a week for one semester.

#### URB 305. Introductory Topics in Urban Studies.

An introduction to urban studies within the framework of different disciplines. Topics include urban history, urban education, politics and governance, economics, design and planning, and society and culture. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

#### URB 315. Urban Studies Research Methods.

An introduction to urban studies research methodologies. Includes sources of urban data, the use of the library in urban research, formulating research questions, research design, methods commonly used in urban research, the use of computers to store and manipulate quantitative urban data, and an introduction to data analysis and theoretical and practical applications of urban research. Three lecture hours a week for one semester. Prerequisite: Mathematics 408C or 408K with a grade of at least C-; Mathematics 316 or Statistics and Scientific Computation 305 with a grade of at least C-; and Urban Studies 301.

### **Upper-Division Courses**

#### URB 325. Special Topics in Urban Studies.

Three lecture hours a week for one semester. Additional hours may be required for some topics. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

#### URB 350. Topics in Urban Politics and Governance.

The basic political and administrative structures of cities and metropolitan regions, including problems associated with local and regional government. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Urban Politics.** Same as Government 370L (Topic 11: Urban Politics). Prerequisite: Six semester hours of lower-division coursework in government.

**Topic 2: Human Health and the Environment.** Same as Geography 356T (Topic 9). Study of how environmental issues directly impact human lives, including the developing and developed worlds, current conditions and future trends, and environmental degradation. Only one of the following may be counted: Geography 356T (Topic: Human Health and the Environment), 356T (Topic 9), Urban Studies 350 (Topic: Human Health and the Environment), 350 (Topic 2). Additional prerequisite: Upper-division standing.

#### URB 351. Topics in Urban Economics.

Urban economics and the application of economic analysis to urban concerns, including economic development, urbanization, urban form, public finance, and competition. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 1: Development Problems and Policies in Latin America.

Same as Economics 355 and Latin American Studies 355 (Topic 1). Analysis of the economies of Latin America. Issues may include the structure and functioning of cities, rural-urban migration, the sectoral composition of GDP and employment, and determinants of growth. Additional prerequisite: Economics 304K and 304L with a grade of at least C- in each.

**Topic 2: Urban Economics.** Same as Economics 334K. Economic analysis of urban areas, emphasizing current problems, such as spatial concentration of poverty, lack of access to jobs and financial services, and transportation systems. Examines the role of policy in addressing these problems. Three lecture hours a week for one semester. Economics 334K and Urban Studies 351 (Topic 2) may not both be counted. Additional prerequisite: Economics 420K or 421K with a grade of at least C-.

**Topic 3: Regional Economics.** Same as Economics 334L. Spatial aspects of economics, including concepts, theories, and policy applications. Three lecture hours a week for one semester. Economics 334L and Urban Studies 351 (Topic 3) may not both be counted. Additional prerequisite: Economics 420K or 421K with a grade of at least C-.

Topic 4: Development Economics. Same as Economics 333K. Introduction to theories of economic development. Economic analysis of leading issues. Three lecture hours a week for one semester. Only one of the following may be counted: Economics 333K, Urban Studies 351 (Topic: Development Economics), 351 (Topic 4). Additional prerequisite: Economics 420K or 421K with a grade of at least C-. **Topic 5: Introduction to Real Estate and Urban Land Development.** Same as Real Estate 358. An examination of the principles of real estate and urban land economics. Subjects include investment, valuation, financing, and public policy in real estate and mortgage markets. Three lecture hours a week for one semester. Only one of the following may be counted: Real Estate 358, Urban Studies 351 (Topic: Introduction to Real Estate and Urban Land Development), 351 (Topic 5). Additional prerequisite: Accounting 310F or 311 or 311H; and Finance 357 or 357H.

**Topic 6: Introduction to Risk Management.** Same as Risk Management 357E. Principles of risk management for individuals and organizations, financial aspects of insurance companies and markets, industry structure, managerial aspects of underwriting and pricing, and public policy issues. Three lecture hours a week for one semester. Only one of the following may be counted: Risk Management 357E, Urban Studies 351 (Topic: Intro to Risk Management), 351 (Topic 6).

#### URB 352. Topics in Urban Design and Planning.

Issues concerning the built environment and urban infrastructure, environmental sustainability, and the public policy framework designed to manage the challenges presented by these issues. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: The Modern American City.** Same as Architecture 350R (Topic 1: The Modern American City) and Geography 337. Issues facing residents of United States cities, such as transportation and housing, poverty and crime, metropolitan finance, environmental and architectural design; historical/comparative urban evolution. Prerequisite: Upper-division standing.

**Topic 2: American Dream: Status Quo and Alternatives.** Same as Architecture 327F. Three lecture hours a week for one semester. Architecture 327F and Urban Studies 352 (Topic 2) may not both be counted.

**Topic 3: Urban Design Practice.** Same as Architecture 350R (Topic 3: Urban Design Practice).

**Topic 4: Economy/Value/Quality of Life**. Same as Architecture 350R (Topic 4: Economy/Value/Quality of Life).

**Topic 5: Modernism in American Design and Architecture.** Same as American Studies 330 and Art History 339Q. A historical survey of artifacts, buildings, and urban environments, focusing on responses to machine-age civilization. Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 330, Art History 339Q, Urban Studies 352 (Topic: Modernism in American Design and Architecture), 352 (Topic 5). Additional prerequisite: Upperdivision standing.

**Topic 6: Principles of Physical Planning.** Same as Community and Regional Planning 369K. Introductory course in the physical dimension of urban planning. Three lecture hours a week for one semester. Only one of the following may be counted: Community and Regional Planning 369K, Urban Studies 352 (Topic: Principles of Physical Planning), 352 (Topic 6). Additional prerequisite: Upperdivision standing, and one of the following with a grade of at least C: Architecture 561R, 661R, 561C, 560T, 660T.

**Topic 7: Building the Sustainable City.** Same as Sociology 323S. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 321K (Topic: Building the Sustainable City), 323S, Urban Studies 352 (Topic: Building the Sustainable City), or 352 (Topic 7). Additional prerequisite: Upper-division standing.

#### URB 353. Topics in Urban History.

The historical evolution of cities, contemporary urban development trends, and the links between social development and physical form. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 1: African American History since 1860. Same as African and African Diaspora Studies 357D, American Studies 321F, and History 357D. Survey of the history of African Americans in the United States from 1860 to the present: Emancipation, Reconstruction politics, migration and urbanization, and the evolution of African American culture; kinds of sources and methods valuable for analyzing African American life and culture. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 357D, American Studies 321 (Topic: African American History since 1860), 321F, History 357D, Urban Studies 353 (Topic 1). Additional prerequisite: Upper-division standing. Topic 2: Texas, 1914 to the Present. Same as History 320R and Mexican American Studies 374 (Topic 16). The steady dissociation of Texas from its Old South status to a transitional state and a power in national politics. Three semester hours of Texas history may be substituted for half of the legislative requirement for American history. Prerequisite: Upper-division standing.

**Topic 5: Environmental History of North America.** Same as American Studies 329 and History 350R (Topic 7). The history of humanity's influence on the plants, animals, microlife, soils, water, and air of North America, and vice versa, from the arrival of the proto-Indians to the contemporary environmental crisis. Only one of the following may be counted: American Studies 329, History 350R (Topic 7), Urban Studies 353 (Topic 5).

**Topic 7: Berlin.** Same as Comparative Literature 323 (Topic 44), European Studies 347 (Topic 34), German, Scandinavian, and Dutch Studies 361M, and History 362G (Topic 17). Three lecture hours a week for one semester. Only one of the following may be counted: Comparative Literature 323 (Topic: Berlin), 323 (Topic 44), European Studies 347 (Topic: Berlin), 347 (Topic 34), German, Scandinavian, and Dutch Studies 360 (Topic: Berlin), 361M, Germanic Civilization 327E (Topic: Berlin), History 362G (Topic: Berlin), 362G (Topic 17), Urban Studies 353 (Topic: Berlin), 353 (Topic 7). Additional prerequisite: Upper-division standing.

#### URB 354. Topics in Urban Society and Culture.

Topics on the social and cultural diversity within cities; social policies; and the sociocultural impact of the media and other institutions on urban development. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 2: Society of Modern Mexico.** Same as Latin American Studies 325 (Topic 1: Society of Modern Mexico) and Sociology 335. Family, community, industrialization, and urbanization in modern Mexico. **Topic 4: The Culture of Cities.** Same as American Studies 370 (Topic 13: The Culture of Cities) and Geography 356T (Topic 1: The Culture of Cities). Examines the social, geographical, and cultural evolution of the United States from a rural and small-town society to an urban and suburban nation. Subjects may include the segregation of public and private space; the formation of urban subcultures organized by gender, work, race, religion, and sexuality; social and spatial divisions

between rich and poor and native-born and immigrant; and the increasing importance of "cultural capital" in reshaping urban politics and in conflicts over revitalization and gentrification. Additional prerequisite: Upper-division standing.

**Topic 7: Vienna: Memory and the City.** Same as American Studies 370 (Topic 41), European Studies 346 (Topic 5), and History 362G (Topic 2). Examines the ways in which cultural memory has shaped, and continues to shape, urban life in Vienna, Austria. Only one of the following may be counted: American Studies 315 (Topic: Vienna: Memory and the City), 370 (Topic 41), European Studies 306 (Topic: Vienna: Memory and the City), 346 (Topic 5), Geography 309 (Topic: Vienna: Memory and the City), Germanic Civilization 311 (Topic: Vienna: Memory and the City), History 306N (Topic: Vienna: Memory and the City), Jbar Studies 305 (Topic: Vienna: Memory and the City), 354 (Topic 7). Additional prerequisite: Upperdivision standing.

**Topic 8: Contemporary Cultural Geography.** Same as Geography 336. Recent theoretical developments in cultural geography, with a focus on landscapes and the everyday practices that imbue them with meaning; the ways those meanings are contested and are the foci of struggle; and how the relationship between culture and space plays a central role in the social construction of identity. Three lecture hours a week for one semester. Only one of the following may be counted: Geography 336, Urban Studies 354 (Topic: Contemporary Cultural Geography), 354 (Topic 8). Additional prerequisite: Upper-division standing.

**Topic 9: Negotiating Urbanization: Case Studies in Turkey.** Same as Middle Eastern Studies 341 (Topic 6). Examines local and transnational forces that have driven and continue to drive contemporary urbanization in Turkey. Focuses on key issues that emerge in rapidly growing cities of the developing world, such as growing income inequality and socioeconomic exclusion, environmental challenges, and rising violence. Only one of the following may be counted: Middle Eastern Studies 326 (Topic: Negotiating Urbanization in the Middle East: Case Studies in Turkey), 341 (Topic 6), Turkish 372 (Topic: Negotiating Urbanization in the Middle East: Case Studies in Turkey), 354 (Topic 9).

**Topic 10: Human Behavior and Social Environment.** Same as Social Work 327. Survey of selected theories of human behavior, including a systems/ecological perspective, ego psychology, and social learning theory, with emphasis on the life cycle from adolescence through adulthood. Three lecture hours and one laboratory hour a week for one semester. Only one of the following may be counted: Social Work 327, Urban Studies 354 (Topic: Human Behavior and Social Environment), 354 (Topic 10). Additional prerequisite: For social work majors, admission to the major in social work; for others, upper-division standing.

**Topic 11: Urban Sociology.** Same as Sociology 321U. Introduction to the study of the city and the suburbs. Specific focus on inequality in urban space, with emphasis on three major United States cities (New York, Chicago, and Los Angeles) and on several third world cities. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 321K (Topic: Urban Sociology), 321U, Urban Studies 354 (Topic: Urban Sociology), 354 (Topic 11). Additional prerequisite: Upper-division standing.

**Topic 12: Sociology of Criminal Justice.** Same as Sociology 325L. Examination of the police, courts, and prisons: how they work, their impact on those who pass through them. Introduction to the American criminal justice system, its policies and procedures. The primary focus will be on the roles and functions of the police, the courts, and corrections, with a special emphasis on how well or not so well the system operates. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 325L, Urban Studies 354 (Topic: Sociology of Criminal Justice), 354 (Topic 12). Additional prerequisite: Upper-division standing.

**Topic 13: American Dilemmas.** Same as Sociology 336C and Women's and Gender Studies 345 (Topic 26). Examination of critical American social problems, including problems in the economic, political, and health care systems, as well as inequities based on income, gender, and race. Exploration of how these problems are a natural outgrowth of the existing social structure. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 336C, Urban Studies 354 (Topic: American Dilemmas), 354 (Topic 13), Women's and Gender Studies 345 (Topic 26). Additional prerequisite: Upper-division standing.

Topic 14: Urban Unrest. Same as Asian American Studies 330 (Topic 6), African and African Diaspora Studies 372F (Topic 13), American Studies 321 (Topic 8), and Anthropology 324L (Topic 46). Analysis of the roots of urban unrest, exploring a range of origins: joblessness, state violence, white flight, backlash against civil rights gains, new immigration, and interracial strife. Beyond race and class, subjects include exploring unrest as a mode of pushing the normative boundaries of gender and sexuality in public space. Course material will draw from film, literature, history, geography, and anthropology. Only one of the following may be counted: African and African Diaspora Studies 372F (Topic: Urban Unrest), 372F (Topic 13), 374D (Topic: Urban Unrest), American Studies 321 (Topic: Urban Unrest), 321 (Topic 8), Anthropology 324L (Topic: Urban Unrest), 324L (Topic 46), Asian American Studies 330 (Topic: Urban Unrest), 330 (Topic 6), Urban Studies 354 (Topic: Urban Unrest), 354 (Topic 14). Topic 15: The Cities of the Middle East. Same as Anthropology 324L

(Topic 51), Islamic Studies 373 (Topic 9), and Middle Eastern Studies 341 (Topic 3). Anthropological and sociological analysis of space, with a special emphasis on urban theory and culture in the Middle East. Only one of the following may be counted: Anthropology 324L (Topic: Cities of the Middle East), 324L (Topic 51), Islamic Studies 373 (Topic: Cities of the Middle East), 373 (Topic 9), Middle Eastern Studies 322K (Topic: Cities of the Middle East), 341 (Topic 3), Urban Studies 354 (Topic: Cities of the Middle East), 354 (Topic 15).

#### URB 360. Internship and Service Learning.

Same as Geography 340U. Internship experience in an urban studiesrelated public or nonprofit agency. The opportunity to apply the knowledge, theory, and understanding gained from courses in areas of specialization to urban issues in a professional setting. Includes an academic service-learning component. Approximately five to ten hours a week for one semester. Only one of the following may be counted: Geography 340U, 356T (DIRECTED INTRNSHPS IN URB STDS), Urban Studies 360. Prerequisite: Upper-division standing; and Urban Studies 301 and 315.

#### URB 370. Senior Project.

Students identify an urban issue, develop a position paper, and work closely with a faculty adviser on a project. Students may use text or other media (such as video or portfolio) to present their arguments. The equivalent of three lecture hours a week for one semester. Prerequisite: Upper-division standing, and Urban Studies 301, 315, and 360 with a grade of at least C in each.

#### URB 379. Conference Course.

Supervised individual study of selected problems in urban studies. Conference course. Prerequisite: Upper-division standing and consent of instructor and the undergraduate adviser.

#### URB 679H. Honors Tutorial Course.

Directed reading and research or creation of an honors project, followed by the writing of a thesis. Conference course for two semesters. Prerequisite: For 679HA, admission to the Urban Studies Honors Program and consent of the urban studies adviser; for 679HB, Urban Studies 679HA.

### **Department of Germanic Studies**

Students with knowledge of German must take a placement test before registering for a German course. Students with transfer credit are strongly encouraged to take a placement test. The lower-division placement test consists of the SAT Subject Test in German with a listening component, with additional questions from the Department of Germanic Studies. The student may earn credit through this examination for any German language course currently offered; the examination also helps the student and the adviser determine with which course the student should begin the study of German at the University. Credit for German 328, and 330C or 331L, may also be earned by special examination. Information about these tests is available from the departmental undergraduate adviser and from Student Testing Services (https://testingservices.utexas.edu/sts).

A student with no knowledge of German may take any beginning German language course. Graduate students preparing for the doctoral reading examination may take German 380C.

Before enrolling for the first time in any other language offered in the Department of Germanic Studies, all students with knowledge of that language, however acquired, must be tested to determine the course for which they should register. Information about placement tests is available from the departmental undergraduate adviser.

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

### Danish: DAN

#### **Lower-Division Courses**

#### DAN 604. Accelerated First-Year Danish.

Six lecture hours a week for one semester, with optional laboratory available.

#### DAN 612. Accelerated Second-Year Danish.

Six lecture hours a week for one semester, with optional laboratory available. Prerequisite: Danish 604.

### DAN 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Danish.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Germanic Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### DAN 327. Advanced Danish I.

Three lecture hours a week for one semester. Prerequisite: Danish 612 with a grade of at least C.

#### DAN 328. Advanced Danish II.

Three lecture hours a week for one semester. Prerequisite: Danish 327 with a grade of at least C.

#### DAN 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Danish.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Germanic Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

# DAN 379. Conference Course in Danish Language or Literature.

Supervised individual study of selected problems in Danish language or literature. Conference course. May be repeated for credit. Prerequisite: Upper-division standing and consent of instructor.

### **Dutch: DCH**

#### **Lower-Division Courses**

#### DCH 604. Accelerated First-Year Dutch.

Six lecture hours a week for one semester, with optional laboratory available.

#### DCH 612. Accelerated Second-Year Dutch.

Six lecture hours a week for one semester, with optional laboratory available. Prerequisite: Dutch 604.

#### DCH 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Dutch.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Germanic Studies. University credit is awarded for work in an exchange program; may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### DCH 327. Advanced Dutch I.

Three lecture hours a week for one semester. Prerequisite: Dutch 612 with a grade of at least C.

#### DCH 328. Advanced Dutch II.

Three lecture hours a week for one semester. Prerequisite: Dutch 327 with a grade of at least C.

# DCH 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Dutch.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Germanic Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### DCH 375. Studies in Dutch Literature.

Selected topics in Dutch and Flemish literature. Conducted in Dutch. Three lecture hours a week for one semester. May be repeated for credit. Prerequisite: Dutch 612 or the equivalent, and consent of instructor.

# DCH 379. Conference Course in Dutch Language or Literature.

Supervised individual study of selected problems in Dutch language or literature. Conference course. May be repeated for credit. Prerequisite: Upper-division standing and consent of instructor.

### Finnish: FNH

### **Lower-Division Courses**

#### FNH 506. First-Year Finnish I.

Basic training in grammatical patterns and usage of Finnish. Five lecture hours a week for one semester.

#### FNH 507. First-Year Finnish II.

Advanced training in grammatical patterns and usage of Finnish. Five lecture hours a week for one semester. Prerequisite: Finnish 506 with a grade of at least C.

### **Upper-Division Courses**

# German, Scandinavian, and Dutch Studies: GSD

### **Lower-Division Courses**

#### GSD 301. Introduction to the Study of Northern Europe.

Introduces significant moments in and monuments from the cultural histories of the German-speaking, Scandinavian, and Dutch nations from their beginnings to the present. Designed to discuss representative problems in research and analysis in cultural studies and the humanities. Three lecture hours a week for one semester.

#### GSD 310. Introductory Topics on Northern Europe.

Introduction to important topics in the history of Northern Europe's culture, including areas from history, the arts, film studies, language and linguistics, and literature. Three lecture hours a week for one semester. Only one of the following may be counted unless the topics vary: German, Scandinavian, and Dutch Studies 310, Germanic Civilization 301, and Scandinavian 302. May be repeated for credit when the topics vary.

**Topic 1: American Jews: The Yiddish Experience.** Same as American Studies 315 (Topic 6), Jewish Studies 311 (Topic 9), and Religious Studies 316K (Topic 2). Focuses on over a century of Yiddish-based contributions to American literature, music, and film, including works by Isaac Bashevis Singer, Michael Chabon, Woody Allen, and the Marx Brothers. Only one of the following may be counted: American Studies 315 (Topic: Jews in America: The Yiddish Experience), 315 (Topic 4), 315 (Topic 6); German, Scandinavian, and Dutch Studies 310 (Topic: Jews in America: The Yiddish Experience), 310 (Topic 1); Jewish Studies 311 (Topic: Jews in America: The Yiddish Experience), 311 (Topic 6), 311 (Topic 9); Religious Studies 313 (Topic: Jews in America: The Yiddish Experience), 313 (Topic 1), 316K (Topic 2).

#### GSD 311C. Movies Go To War.

Same as American Studies 315C, Comparative Literature 305 (Topic 3), and European Studies 307 (Topic 4). A comparison of films from various nations about major twentieth century wars to the historical facts of the conflicts as practicums in critical comparative analysis of histories as representations. Only one of the following may be counted: American Studies 315 (Topic: Movies Go to War, World War I to Vietnam), 315C, Comparative Literature 305 (Topic: Movies Go to War, World War I to Vietnam), 305 (Topic 3), European Studies 307 (Topic: Movies Go to War, World War I to Vietnam), 307 (Topic 4), German, Scandinavian, and Dutch Studies 311C, Germanic Civilization 311 (Topic 2: Movies Go to War, World War I to Vietnam).

#### GSD 311D. Race and Gender Stereotypes in Germany.

Same as European Studies 306 (Topic 1). Examination of pseudoscientific popular theories of "race" and gender that developed in Germany and elsewhere in Europe in the nineteenth century, and how these affected the lives of millions and shaped current thinking about "racial" and gender differences. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 306 (Topic: Bad Blood), 306 (Topic 1), German, Scandinavian, and Dutch Studies 311D, Germanic Civilization 301 (Topic: Bad Blood).

#### GSD 311E. Grimms' Fairy Tales.

Same as Comparative Literature 305 (Topic 4) and European Studies 307 (Topic 5). Reading and discussion of tales from the Grimms' collection, as well as some of the relevant secondary literature. Three lecture hours a week for one semester. Only one of the following may be counted: Comparative Literature 305 (Topic: Grimms' Fairy Tales), 305 (Topic 4), European Studies 307 (Topic: Grimms' Fairy Tales), 307 (Topic 5), German, Scandinavian, and Dutch Studies 310 (Topic: Grimms' Fairy Tales), 311E, Germanic Civilization 301 (Topic: Grimms' Fairy Tales).

#### GSD 311F. Germany and Globalization.

Same as American Studies 315 (Topic 8) and European Studies 308 (Topic 1). Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 315 (Topic: Germany and Globalization), 315 (Topic 8), European Studies 308 (Germany and Globalization), 308 (Topic 1), German, Scandinavian, and Dutch Studies 310 (Topic: Germany and Globalization), 311F, Germanic Civilization 301 (Topic: Germany and Globalization).

#### GSD 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in the Study of Northern Europe.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Germanic Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. Only one of the following may be counted: German, Scandinavian, and Dutch Studies 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S, Germanic Civilization 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### GSD 321W. German Cultural History.

Restricted to students enrolled in the University of Wuerzburg Summer Program. Excursions, local research, and exposure to a German viewpoint on contemporary European affairs. The equivalent of three lecture hours a week for one semester. Taught in Wuerzburg, Germany. German, Scandinavian, and Dutch Studies 321W and Germanic Civilization 327E (Topic 7: German Cultural History) may not both be counted.

#### GSD 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in the Study of Northern Europe.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Germanic Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. Only one of the following may be counted: German, Scandinavian, and Dutch Studies 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S, Germanic Civilization 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S, Scandinavian 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S, May be repeated for credit when the topics vary.

#### GSD 330. Topics in Film and Media.

In-depth explorations of topics and problems in film and media studies from the perspective of one or more of the nations of Northern Europe and/or in relation to Northern Europe's cultural nexuses. Three lecture hours a week for one semester. Some topics may require additional hours for film screenings. Only one of the following may be counted unless the topics vary: German, Scandinavian, and Dutch Studies 330, Germanic Civilization 361E, and Scandinavian 327. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

#### GSD 331C. Films of Ingmar Bergman.

Same as Comparative Literature 323 (Topic 11) and European Studies 347 (Topic 13). An introduction to the films of Ingmar Bergman. Only one of the following may be counted: Comparative Literature 323 (Topic: Films of Ingmar Bergman), 323 (Topic 11), English 322 (Topic 18), European Studies 347 (Topic: Films of Ingmar Bergman), 347 (Topic 13), German, Scandinavian, and Dutch Studies 331C, Scandinavian 327 (Topic 9). Prerequisite: Upper-division standing.

# GSD 331D. Feminism and Film: Women Filmmakers in Northern and Central Europe.

Same as Comparative Literature 323 (Topic 33), European Studies 347 (Topic 24), and Women's and Gender Studies 340 (Topic 65). An introduction to the work of women filmmakers from Scandinavia, Germany, as well as to the viewing and interpretation of films in general. Three lecture hours a week for one semester. Only one of the following may be counted: Comparative Literature 323 (Topic: Women Filmmakers in Northern and Central Europe), 323 (Topic 33), European Studies 347 (Topic: Women Filmmakers in Northern and Central Europe), 347 (Topic 24), German, Scandinavian, and Dutch Studies 330 (Topic: Women Filmmakers in Northern and Central Europe), 331D, Women's and Gender Studies 340 (Topic: Women Filmmakers in Northern and Central Europe), 340 (Topic 65). Prerequisite: Upper-division standing.

#### GSD 340. Topics in Narrative and Textual Studies.

Examination of significant case studies, often literary, on how narratives and other text-types are constructed (as art and/or material culture), circulated, and understood by readers and on how they work in and between various national traditions in Northern Europe and/or in relation to its cultural nexuses. Only one of the following may be counted unless the topics vary: German, Scandinavian, and Dutch Studies 340, Germanic Civilization 323E, 362E, Scandinavian 323, 373. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

#### GSD 341D. Social Dramas of Henrik Ibsen.

Same as Comparative Literature 323 (Topic 17), European Studies 347 (Topic 12), and Women's and Gender Studies 345 (Topic 14). A detailed introduction to Ibsen's social dramas (1877-1899), emphasizing their unity as a prolonged commentary on the society of his era and the variety of its human problems. Special emphasis on subjects such as: the family and the home; the public world of reputation, work, and citizenship; the predicaments of men and women in a male-dominated society; and the motives of our interventions into the lives of others. Only one of the following may be counted: Comparative Literature 323 (Topic: Social Dramas of Henrik Ibsen), 323 (Topic 17), English 322 (Topic 17), European Studies 347 (Topic: Social Dramas of Henrik Ibsen), 347 (Topic 12), German, Scandinavian, and Dutch Studies 341D, Scandinavian 323 (Topic 2), Women's and Gender Studies 345 (Topic 14). Prerequisite: Upper-division standing.

#### GSD 341E. Hans Christian Andersen.

Same as Comparative Literature 323 (Topic 12) and European Studies 347 (Topic 14). Introduction to such Hans Christian Andersen tales as "The Little Mermaid," "The Ugly Duckling," and "The Emperor's New Clothes." Examination of their author and the romantic period in which they were written, as well as their historical, philosophical, and literary context. Only one of the following may be counted: Comparative Literature 323 (Topic: Hans Christian Andersen), 323 (Topic 12), English 322 (Topic 19), European Studies 347 (Topic: Hans Christian Andersen), 347 (Topic 14), German, Scandinavian, and Dutch Studies 341E, Germanic Civilization 323E (Topic 4), Scandinavian 373 (Topic 4). Prerequisite: Upper-division standing.

#### GSD 341F. Women and the Holocaust.

Same as Comparative Literature 323 (Topic 19), European Studies 346 (Topic 10), Jewish Studies 363 (Topic 11), and Women's and Gender Studies 340 (Topic 50). Introduction to both the history of Jewish and German women during World War II and the Holocaust, and to women's narratives and self-representations of this period. Historical sources, memoirs, films, and interviews will be used as source material. Three lecture hours a week for one semester. Only one of the following may be counted: Comparative Literature 323 (Topic: Women's Narratives of the Holocaust and World War II), 323 (Topic 19), European Studies 346 (Topic: Women's Narratives of the Holocaust and World War II), 346 (Topic 10), German, Scandinavian, and Dutch Studies 341F, Germanic Civilization 323E (Topic: Women's Narratives of the Holocaust and World War II), Jewish Studies 363 (Topic 11), Women's and Gender Studies 340 (Topic: Women's Narratives of the Holocaust and World War II), 340 (Topic 50). Prerequisite: Upper-division standing.

#### GSD 341G. Isak Dinesen/Karen Blixen.

Same as Comparative Literature 323 (Topic 14), European Studies 347 (Topic 15), and Women's and Gender Studies 345 (Topic 13). An introduction to the twentieth-century Danish author Karen Blixen, focusing on her major themes such as gender and destiny, and examining her role as a literary figure. Only one of the following may be counted: Comparative Literature 323 (Topic: Isak Dinesen/Karen Blixen), 323 (Topic 14), European Studies 347 (Topic: Isak Dinesen/ Karen Blixen), 347 (Topic 15), German, Scandinavian, and Dutch Studies 341G, Germanic Civilization 323E (Topic 1), Scandinavian 373 (Topic 6), Women's and Gender Studies 345 (Topic 13). Prerequisite: Upper-division standing.

#### GSD 341J. Contemporary Scandinavian Stories.

Same as Comparative Literature 323 (Topic 10) and European Studies 347 (Topic 16). An analysis of contemporary Scandinavian literature and films, how they reflect Scandinavian reality, and how Scandinavian identity is created through sports, food, and politics. Only one of the following may be counted: Comparative Literature 323 (Topic: Contemporary Scandinavian Stories), 323 (Topic 10), European Studies 347 (Topic: Contemporary Scandinavian Stories), 347 (Topic 16), German, Scandinavian, and Dutch Studies 341J, Germanic Civilization 323E (Topic: Contemporary Scandinavian Stories), Scandinavian 373 (Topic: Contemporary Scandinavian Stories). Prerequisite: Upper-division standing.

# GSD 341K. The Scandinavian Contribution to World Literature.

Same as Comparative Literature 323 (Topic 16) and European Studies 347 (Topic 17). Close readings of the most influential Scandinavian texts, including works by Nobel Prize-winning authors such as Knut Hamsun and Selma Lagerlof, as well as the playwrights August Strindberg and Henrik Ibsen while addressing important themes caused by the revolutionary transition to modernity in Scandinavia around 1900, including emancipation of women and sexuality. Only one of the following may be counted: Comparative Literature 323 (Topic: The Scandinavian Contribution to World Literature), 323 (Topic 16), European Studies 347 (Topic: The Scandinavian Contribution to World Literature), 347 (Topic 17), German, Scandinavian, and Dutch Studies 341K, Germanic Civilization 323E (Topic: The Scandinavian Contribution to World Literature), Scandinavian 373 (Topic: The Scandinavian Contribution to World Literature). Prerequisite: Upper-division standing.

#### GSD 341L. Vikings and Their Literature.

Same as Comparative Literature 323 (Topic 43) and European Studies 347 (Topic 35). Three lecture hours a week for one semester. Only one of the following may be counted: Anthropology 324L (Topic: Vikings and Their Literature), Comparative Literature 323 (Topic: Vikings and Their Literature), 323 (Topic 43), English 322 (Topic: Vikings and Their Literature), 823 (Topic 43), English 322 (Topic: Vikings and Their Literature), 847 (Topic 35), 361 (Topic: Vikings and Their Literature), German, Scandinavian, and Dutch Studies 340 (Topic: Vikings and Their Literature), 341L, Germanic Civilization 323E (Topic: Vikings and Their Literature), Scandinavian 323 (Topic: Vikings and Their Literature). Prerequisite: Upper-division standing.

#### GSD 350. Topics in Linguistics.

In-depth explorations in contemporary and historical topics and problems associated with linguistics and the systematic study of languages in Northern Europe and related regions. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

# GSD 351C. Language, Culture, and the Texas German Experience.

Same as American Studies 370 (Topic 47), Anthropology 324L (Topic 55), and Linguistics 373 (Topic 10). The evolution of the culture and language of German immigrants to Texas from the 1840s through the present and how they have influenced other ethnic groups in Texas. Three lectures a week for one semester. Only one of the following may be counted: American Studies 370 (Topic: Language, Culture, and the Texas German Experience), 370 (Topic 47), Anthropology 324L (Topic: Language, Culture, and the Texas Germanic Civilization 327E (Topic 11) German, Scandinavian, and Dutch Studies 351C, Linguistics 350 (Topic: Language, Culture, and the Texas German Experience), 373 (Topic 10). Prerequisite: Upper-division standing.

#### GSD 360. Topics in Culture and Society.

In-depth explorations of contemporary and historical moments in the cultures, social relations, cultural histories, and intellectual histories of the nations in Northern Europe and its cultural networks. Three lecture hours a week for one semester. Additional hours may be required for some topics. Only one of the following may be counted unless the topics vary: German, Scandinavian, and Dutch Studies 360, Germanic Civilization 327E, 340E, 360E, 362E, Scandinavian 327, 335. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 1: Holocaust Aftereffects.** Same as Comparative Literature 323 (Topic 40), European Studies 346 (Topic 23), Jewish Studies 365 (Topic 14), Religious Studies 357 (Topic 18), and Women's and Gender Studies 340 (Topic 66). Explores the historical, political, psychological, theological, and cultural fallout of the Holocaust, as well as literary and cinematic responses in Europe and the United States. Only one of the following may be counted: Comparative Literature 323 (Topic: Holocaust Aftereffects), 323 (Topic 40), European Studies 346 (Topic: Holocaust Aftereffects), 346 (Topic 23), German, Scandinavian, and Dutch Studies 360 (Topic 1), Germanic Civilization 323E (Topic: Holocaust Aftereffects), Jewish Studies 365

(Topic: Holocaust Aftereffects), 365 (Topic 14), Liberal Arts Honors 350 (Topic: Holocaust Aftereffects), Religious Studies 357 (Topic: Holocaust Aftereffects), 357 (Topic 18), Women's and Gender Studies 340 (Topic: Holocaust Aftereffects), 340 (Topic 66).

**Topic 3: Heretics and Freedom Fighters, 1350-1650.** Same as European Studies 346 (Topic 8), History 362G (Topic 12), and Religious Studies 357 (Topic 12). Explores the theologies, politics, and personal identities that emerged and passed away in this era. Only one of the following may be counted: Czech 324 (Topic: Heretics and Freedom Fighters, 1350-1650), 324 (Topic 4), European Studies 346 (Topic: Heretics and Freedom Fighters, 1350-1650), 346 (Topic 8), Germanic Civilization 327E (Topic: Heretics and Freedom Fighters, 1350-1650), German, Scandinavian, and Dutch Studies 360 (Topic 3), History 362G (Topic: Heretics and Freedom Fighters, 1350-1650), 362G (Topic: Heretics and Freedom Fighters, 1350-1650), 357 (Topic 12), Russian, East European, and Eurasian Studies 325 (Topic: Heretics and Freedom Fighters, 1350-1650), 325 (Topic: 28).

#### GSD 361C. Introduction to Germanic Religion and Myth.

Same as European Studies 347 (Topic 3) and Religious Studies 357 (Topic 17). Survey of the sources and main features of Germanic religion and of the transition from paganism to Christianity in northern Europe and the Germanic territories of western Europe. Subjects include cosmogonic myths; the origin of man and of society; the concept of the soul; gods and goddesses and their mythology; and the organization of worship. Three lecture hours a week for one semester. Only one of the following may be counted: English 322 (Topic 2), European Studies 347 (Topic 3), German, Scandinavian, and Dutch Studies 361C, Germanic Civilization 340E (Topic 1), Religious Studies 365 (Topic 2), Religious Studies 357 (Topic 17). Prerequisite: Upper-division standing.

#### GSD 361D. Medieval Women Mystics.

Same as European Studies 347 (Topic 18), Religious Studies 357 (Topic 15), and Women's and Gender Studies 340 (Topic 51). The life and writings of Saint Birgitta of Sweden, fourteenth-century visionary, religious reformer, and pilgrim, examined and compared with her predecessor Hildegard of Bingen (Germany), her successor Margery Kempe (England), as well as Margery's mentor, Julian of Norwich. Social and historical contexts for all four of these women mystics will be explored in depth. Only one of the following may be counted: English 322 (Topic: Birgitta, Hildegard, and Margery), European Studies 347 (Topic: Birgitta, Hildegard, and Margery), 347 (Topic 18), German, Scandinavian, and Dutch Studies 361D, Germanic Civilization 327E (Topic 10: Birgitta, Hildegard, and Margery), Religious Studies 357 (Topic: Birgitta, Hildegard, and Margery), 357 (Topic 15), Scandinavian 373 (Topic 8: Birgitta, Hildegard, and Margery), Women's and Gender Studies 340 (Topic: Birgitta, Hildegard, and Margery), 340 (Topic 51). Prerequisite: Upper-division standing.

#### GSD 361E. Tolerance in Dutch Culture.

Same as European Studies 347 (Topic 19) and Women's and Gender Studies 340 (Topic 37). The historical roots of Dutch "tolerance" and how it plays a role in current Dutch culture and attitudes towards religious, gender, and sexual differences, as well as drug use, prostitution, and euthanasia. Exploration of the stereotypes and the actuality of these Dutch attitudes and policies from an international comparative perspective. Only one of the following may be counted: European Studies 347 (Topic: Dutch Culture: Too tolerant?), 347 (Topic 19), German, Scandinavian, and Dutch Studies 361E, Germanic Civilization 327E (Topic: Dutch Culture: Too tolerant?), Women's and Gender Studies 340 (Topic: Dutch Culture: Too tolerant?), 340 (Topic 37). Prerequisite: Upperdivision standing.

#### GSD 361F. Squaring the Vienna Circle.

Same as Comparative Literature 323 (Topic 18) and European Studies 347 (Topic 20). Traces the origin of the Vienna Circle of Logical Empiricism in nineteenth-century Europe, and introduces central texts and problems of intellectual history and historical epistemology at the roots of today's analytic philosophy. Only one of the following may be counted: Comparative Literature 323 (Topic: Squaring the Vienna Circle), 323 (Topic 18), European Studies 347 (Topic: Squaring the Vienna Circle), 347 (Topic 20), German, Scandinavian, and Dutch Studies 361F, Germanic Civilization 362E (Topic: Squaring the Vienna Circle), Philosophy 327 (Topic: Squaring the Vienna Circle), 354 (Topic: Squaring the Vienna Circle). Prerequisite: Upper-division standing.

# GSD 361G. Northern Gods, Northern Faiths: The Conversion of Scandinavians, Finns, Northern Slavs and Shamans.

Same as Religious Studies 357 (Topic 16) and Russian, East European, and Eurasian Studies 345 (Topic 7). An introduction to the basic source texts for several pre-Christian belief systems evolving in geographic proximity and their influence on one another including pre-Christian Slavic; pre-Christian Scandinavian; pre-Christian Sami and Finnish; and ancient and modern Siberian shamanism, Only one of the following may be counted: German, Scandinavian, and Dutch Studies 361G, Religious Studies 357 (Topic 16), Russian, East European, and Eurasian Studies 345 (Topic 7). Prerequisite: Upper-division standing.

#### GSD 361J. Protest, Revolt, and Revolution in West Germany.

Same as European Studies 346 (Topic 20). Explores pivotal political and cultural movements in post-1945 West Germany, including the student movement, terrorism, feminism, the Green movement, and the anti-nuclear movement. Students engage with a wide array of primary and secondary sources ranging from literature and films to essays, newspaper articles, and speeches in order to examine the roots and results of protest, revolt, and revolution during this period of German history. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic: Protest, Revolt, and Revolution in Postwar Germany), 346 (Topic 20), German, Scandinavian, and Dutch Studies 360 (Topic: Protest, Revolt, and Revolution in Postwar Germany), 361 J, Germanic Civilization 360E (Topic: Protest, Revolt, and Revolution in Postwar Germany). Prerequisite: Upper-division standing.

#### GSD 361K. German Nationalisms.

Same as European Studies 346 (Topic 22), Government 365N (Topic 19), and Russian, East European, and Eurasian Studies 335 (Topic 20). History of diverse views and movements regarding German national identity within their respective contexts, 1800-present. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic: German Nationalisms), 346 (Topic 22), German, Scandinavian, and Dutch Studies 361K, Germanic Civilization 360E (Topic 3), Government 365N (Topic 6), 365N (Topic 19), Russian, East European and Eurasian Studies 335 (Topic: German Nationalisms), 335 (Topic 20). Prerequisite: Upper-division standing.

#### GSD 361L. Anti-Semitism in History and Literature.

Same as Comparative Literature 323 (Topic 42), European Studies 346 (Topic 29), and Jewish Studies 364 (Topic 1). Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic: Anti-Semitism in History and Literature), 346 (Topic 29), Comparative Literature 323 (Topic: Anti-Semitism in History and Literature), 323 (Topic 42), German, Scandinavian, and Dutch Studies 360 (Topic: Anti-Semitism in History and Literature), 361 (Topic: Anti-Semitism in History and Literature), 364 (Topic 1). Prerequisite: Upper-division standing.

#### GSD 361M. Berlin.

Same as Comparative Literature 323 (Topic 44), European Studies 347 (Topic 34), History 362G (Topic 17), and Urban Studies 353 (Topic 7). Three lecture hours a week for one semester. Only one of the following may be counted: Comparative Literature 323 (Topic: Berlin), 323 (Topic 44), European Studies 347 (Topic: Berlin), 347 (Topic 34), German, Scandinavian, and Dutch Studies 360 (Topic: Berlin), 361M, Germanic Civilization 327E (Topic: Berlin), History 362G (Topic: Berlin), 362G (Topic 17), Urban Studies 353 (Topic: Berlin), 353 (Topic 7). Prerequisite: Upper-division standing.

# GSD 377. Capstone Research in German, Scandinavian, and Dutch Studies.

Work leading to assembling a capstone portfolio in German, Scandinavian, and Dutch Studies, including tutorials on norms for presentation, writing, documentation, and research. The equivalent of three lecture hours a week for one semester. Prerequisite: Upper-division standing, German, Scandinavian, and Dutch Studies 301, nine semester hours of upper-division coursework in German, Scandinavian, and Dutch Studies, and consent of instructor.

# GSD 379. Conference Course in German, Scandinavian, and Dutch Studies.

Supervised individual study of selected problems in German, Scandinavian, and Dutch Studies. Conference course. May be repeated for credit. Prerequisite: Upper-division standing and consent of instructor.

#### GSD 679H. Honors Tutorial Course.

Supervised individual research on a literary or linguistic problem, culminating in an honors paper of some length. The equivalent of three lecture hours a week for two semesters. Prerequisite: For 679HA, upperdivision standing, six semester hours of upper-division coursework in German, Scandinavian, and Dutch Studies, a University grade point average of at least 3.00, a grade point average in German, Scandinavian, and Dutch Studies of at least 3.50, and admission to the German, Scandinavian, and Dutch Studies Honors Program; for 679HB, German, Scandinavian, and Dutch Studies 679HA.

### German: GER

#### **Lower-Division Courses**

#### GER 604. Accelerated First-Year German.

Six lecture hours a week for one semester, with optional laboratory available. Only one of the following may be counted: German 601C, 604, 506. Only one of the following may be counted: German 601C, 604, 507, 507R, 508K.

#### GER 506 (TCCN: GERM 1511). First-Year German I.

Basic training in grammatical patterns and usage of modern German. Five lecture hours a week for one semester. Only one of the following may be counted: German 601C, 604, 506.

#### GER 507 (TCCN: GERM 1512). First-Year German II.

Advanced training in grammatical patterns and usage of modern German. Five lecture hours a week for one semester. Only one of the following may be counted: German 601C, 604, 507, 507R, 508K. Prerequisite: German 506 with a grade of at least C.

# GER 612. Accelerated Second-Year German: Readings in Modern German.

Grammar review, composition, readings and recitation, discussion of literary works, and German culture. Six lecture hours a week for one semester. Only one of the following may be counted: German 611C, 612, 312K, 312R, 312V. Only one of the following may be counted: German 611C, 612, 312L, 312S, 312W. Prerequisite: German 604, 507, or 508K with a grade of at least C.

### GER 312K (TCCN: GERM 2311). Second-Year German I: Readings in Humanities and Social Sciences.

Three lecture hours a week for one semester. Only one of the following may be counted: German 611C, 612, 312K, 312R, 312V. Prerequisite: German 604, 507, or 508K with a grade of at least C.

# GER 312L (TCCN: GERM 2312). Second-Year German II: Readings in Humanities and Social Sciences.

Three lecture hours a week for one semester. Only one of the following may be counted: German 611C, 612, 312L, 312S, 312W. Prerequisite: German 312K or 312V with a grade of at least C.

#### GER 312V. Second-Year German I: Business German.

German 312V covers the same material as 312K, but with readings, discussions, and exercises that focus on the business world. Emphasis on practical, career-oriented competence. Three lecture hours a week for one semester. Only one of the following may be counted: German 611C, 612, 312K, 312R, 312V. Prerequisite: German 604, 507, or 508K with a grade of at least C.

#### GER 312W. Second-Year German II: Business German.

German 312W covers the same material as 312L, but with readings, discussions, and exercises that focus on the business world. Emphasis on practical, career-oriented competence. Three lecture hours a week for one semester. Only one of the following may be counted: German 611C, 612, 312L, 312S, 312W. Prerequisite: German 312K or 312V with a grade of at least C.

#### GER 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in German.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Germanic Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### GER 328. Advanced German Grammar.

Description of German sounds, grammatical structures, pronunciation, word formation. Three lecture hours a week for one semester. Prerequisite: German 310, 612, 312L, 312S, 312W, or 317C with a grade of at least C.

#### GER 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in German.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Germanic Studies. University credit is awarded to work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

# GER 330C. Advanced Conversation and Composition: Culture.

German cultural material from print and visual media provides the basis for advanced conversation and composition, with considerable practice in the writing of short essays in German. Three lecture hours a week for one semester. Only one of the following may be counted: German 330C or 331L. Prerequisite: German 310, 612, 312L, 312S, 312W, or 317C with a grade of at least C.

#### GER 130D. German across Disciplines.

Students read and discuss German language materials related to the subject matter of another designated course. One lecture hour a week for one semester. May be repeated for credit. Prerequisite: Three semester hours of upper-division coursework in German with a grade of at least C.

# GER 331L. Advanced Conversation and Composition: Literature.

German literary material from print and visual media provides the basis for advanced conversation and composition, with considerable practice in the writing of short essays in German. Three lecture hours a week for one semester. Only one of the following may be counted: German 330C or 331L. Prerequisite: German 310, 612, 312L, 312S, 312W, or 317C with a grade of at least C.

#### GER 340C. Historical Backgrounds of German Civilization.

Cultural, social, and literary history of German-speaking Europe of the Middle Ages. Studies humanism, the Reformation, absolutism, and the early Enlightenment (between 1200 and 1750). Taught in German. Three lecture hours a week for one semester. Prerequisite: Three semester hours of upper-division coursework in German with a grade of at least C.

#### GER 343C. Contemporary German Civilization.

Cultural, social, and literary history of Germany between 1900 and reunification. Taught in German. Three lecture hours a week for one semester. Prerequisite: Three semester hours of upper-division coursework in German with a grade of at least C.

# GER 346L. German Literature between the Enlightenment and the Present.

Cultural, social, and literary history of German-speaking Europe between 1750 and 1900. Taught in German. Three lecture hours a week for one semester. Prerequisite: Three semester hours of upper-division coursework in German with a grade of at least C.

# GER 347L. Language and Society in the German-speaking Countries.

Uses language and linguistics to study the culture and society of the German-speaking countries. Taught in German. Three lecture hours a week for one semester. Prerequisite: Three semester hours of upperdivision coursework in German with a grade of at least C.

#### GER 348D. German Play: Student Production.

Discussion, staging, and production of a German play. Three hours of lecture or laboratory a week for one semester. Prerequisite: One of the following with a grade of at least C: German 612 or 312L.

#### GER 149T, 249T, 349T. Introduction to Teaching German.

Supervised individual instruction designed to offer students an introduction to principles of foreign language education and the opportunity to teach German in local elementary schools. Weekly class meetings for four weeks, followed by one, two, or three student teaching hours a week for eight weeks. Additional class meetings may also be required. May be repeated for credit, but no more than three semester hours may be counted toward a degree in the College of Liberal Arts. May not be counted toward a major in German. Prerequisite: Credit or registration for German 312L or the equivalent.

#### GER 363K. Topics in German Culture.

Study of selected aspects of Germanic civilization, such as science and philosophy, fine arts, film, history, social institutions. Conducted in German. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Six semester hours of upperdivision coursework in German.

**Topic 1: Classics of German Cinema**. An introduction to German cinema through its most innovative, influential, and important films and filmmakers. German 363K (Topic: German Cinema Since 1933) and 363K (Topic 1) may not both be counted.

#### GER 369. Topics in Germanic Languages.

Introduction to the phonology, morphology, syntax, dialectology, or lexicography of individual Germanic languages. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: The Structure of the German Language.** German 369 (Topic 1) and Linguistics 373 (Topic 6: The Structure of the German Language) may not both be counted. Additional prerequisite: Three semester hours of upper-division coursework in German or linguistics. **Topic 4: The German Language: Historical Perspectives.** Same as Anthropology 320L (Topic 9) and Linguistics 373 (Topic 9). Only one of the following may be counted: Anthropology 320L (Topic 8: German and English: Historical Perspectives), 320L (Topic 9), Classical Civilization 348 (Topic 8: German and English: Historical Perspectives), 320L (Topic 9), Classical Civilization 348 (Topic 4), Germanic Civilization 327E (Topic 9: German and English: Historical Perspectives), Linguistics 373 (Topic 8: German and English: Historical Perspectives), 373 (Topic 9). Additional prerequisite: Three semester hours of upper-division coursework in German or Linguistics.

Topic 7: Translation I. Topic 8: Translation II.

#### GER 373. Topics in Germanic Literature.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Six semester hours of upper-division coursework in German.

### GER 179, 279, 379. Conference Course in Germanic Language or Literature.

Supervised individual instruction course in which students engage in special studies necessary to expand their acquaintance with any subject in Germanic languages or literature. Conference course. May be repeated for credit. Prerequisite: Six semester hours of upper-division coursework in German.

#### GER 679H. Honors Tutorial Course.

Supervised individual research on a literary or linguistic problem, culminating in an honors paper of some length. Conference course for two semesters. Prerequisite: For 679HA, upper-division standing, six semester hours of upper-division German, a University grade point average of at least 3.00, a grade point average in German of at least 3.50, and admission to the Germanic Studies Honors Program; for 679HB, German 679HA.

### Norwegian: NOR

### **Lower-Division Courses**

#### NOR 604. Accelerated First-Year Norwegian.

Six lecture hours a week for one semester, with optional laboratory available.

#### NOR 612. Accelerated Second-Year Norwegian.

Six lecture hours a week for one semester, with optional laboratory available. Prerequisite: Norwegian 604.

#### NOR 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Norwegian.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser for the Department of Germanic Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer work is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### NOR 327. Advanced Norwegian I.

Norwegian language and culture with a focus on the skills of speaking, comprehension, reading, and writing Norwegian. Three lecture hours a week for one semester. Norwegian 327 and Scandinavian 369 (Topic: Advanced Norwegian Language and Culture I) may not both be counted. Prerequisite: Norwegian 612 with a grade of at least C.

#### NOR 328. Advanced Norwegian II.

Continuation of Norwegian 327. Further study of Norwegian reading, writing, speaking, and aural comprehension. Readings include contemporary journalism, fiction, and other texts that promote the understanding of a modern Scandinavian society. Three lecture hours a week for one semester. Norwegian 328 and Scandinavian 369 (Topic: Advanced Norwegian Language and Culture II) may not both be counted. Prerequisite: Norwegian 327 with a grade of at least C.

#### NOR 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Norwegian.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Germanic Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

# NOR 379. Conference Course in Norwegian Language or Literature.

Supervised individual study of selected problems in Norwegian language or literature. Conference course. May be repeated for credit. Prerequisite: Upper-division standing and consent of instructor.

### Swedish: SWE

#### **Lower-Division Courses**

#### SWE 604. Accelerated First-Year Swedish.

Six lecture hours a week for one semester, with optional laboratory available.

#### SWE 612. Accelerated Second-Year Swedish.

Six lecture hours a week for one semester, with optional laboratory available. Prerequisite: Swedish 604.

#### SWE 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Swedish.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Germanic Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer work is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### SWE 327. Advanced Swedish I.

Three lecture hours a week for one semester. Prerequisite: Swedish 612 with a grade of at least C.

#### SWE 328. Advanced Swedish II.

Three lecture hours a week for one semester. Prerequisite: Swedish 327 with a grade of at least C.

# SWE 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Swedish.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Germanic Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

# SWE 379. Conference Course in Swedish Language or Literature.

Supervised individual study of selected problems in Swedish language or literature. Conference course. May be repeated for credit. Prerequisite: Upper-division standing and consent of instructor.

### Yiddish: YID

### **Lower-Division Courses**

#### YID 604. Accelerated First-Year Yiddish.

Six lecture hours a week for one semester, with optional laboratory available.

#### YID 612. Accelerated Second-Year Yiddish.

Six lecture hours a week for one semester, with optional laboratory available. Prerequisite: Yiddish 604.

#### YID 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Yiddish.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Germanic Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### YID 327. Advanced Yiddish I.

Three lecture hours a week for one semester. Prerequisite: Yiddish 612 with a grade of at least C.

#### YID 328. Advanced Yiddish II.

Three lecture hours a week for one semester. Prerequisite: Yiddish 327 with a grade of at least C.

#### YID 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Yiddish.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Germanic Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

# YID 179, 279, 379. Conference Course in Yiddish Language or Literature.

Supervised individual instruction course in which students engage in special studies necessary to expand their acquaintance with any subject in Yiddish language or literature. Conference course. May be repeated for credit. Prerequisite: Upper-division standing and consent of instructor.

### **Department of Government**

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

### **Government: GOV**

### **Lower-Division Courses**

#### GOV 105. Texas Government.

A brief survey of the organization and process of Texas government. Topics include the Constitution, political parties, interest groups, elections, branches of government, taxing and spending. The equivalent of one lecture hour a week for one semester.

#### GOV 310L (TCCN: GOVT 2301). American Government.

A basic survey of American government, including fundamental political institutions, federal, state, and local; special attention to the United States and Texas Constitutions. Part of a six-semester-hour integrated sequence, the second half of which is Government 312L. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Fulfills first half of legislative requirement for government.

# GOV 312L (TCCN: GOVT 2302). Issues and Policies in American Government.

Analysis of underlying themes concerned with American political institutions and policies, including the United States Constitution. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Fulfills second half of legislative requirement for government. Government 312L and 312P may not both be counted. Offered on the letter-grade basis only.

### GOV 312P. Constitutional Principles: Core Texts.

Close readings from primary texts that have shaped or that reflect deeply upon American democracy, including the Declaration of Independence, The Federalist Papers, and Tocqueville's Democracy in America. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Fulfills second half of legislative requirement for government. Government 312P and 312L may not both be counted. Offered on the letter-grade basis only.

#### GOV 314. Introductory Topics in Political Science.

Introduction to varying topics in government and politics. Three lecture hours a week for one semester. Does not fulfill any part of the legislative requirement for government. May be repeated for credit when the topics vary.

#### Topic 2: American Policy toward Eastern Europe.

**Topic 3: Introduction to the Middle East: Adjustment and Change in Modern Times.** Same as History 306N (Topic 5) and Middle Eastern Studies 301L. The responses of the societies of the Middle East and North Africa (Turkey, Iran, Afghanistan, Israel, and the Arab world) to Western cultural and political challenges, primarily since about 1800. Three lecture hours a week for one semester. Only one of the following may be counted: Government 314 (Topic 3), History 306N (Topic 5), Middle Eastern Studies 301L.

Topic 4: Introduction to Russian, East European, and Eurasian Studies: Political Science. Government 314 (Topic 4) and Russian, East European, and Eurasian Studies 301 may not both be counted. Topic 5: Asia's Futures. Same as Asian Studies 301M (Topic 6: Asia's Futures). Current issues, visible trends, and projections for Asia's future.

**Topic 6: Competing Visions of the Good Life.** Same as Core Texts and Ideas 303. Introduces the great rival conceptions of the moral basis and goals of political life as elaborated by revolutionary thinkers throughout the history of political philosophy, including Aristotle, Aquinas, Locke, late modern critics of the Enlightenment, and others. Core Texts and Ideas 303 and Government 314 (Topic 6) may not both be counted.

**Topic 7: Race, Politics, and Identity in Asian America.** Same as Asian American Studies 310 (Topic 2). An introduction to Asian American politics. Subjects include the American political process, and the historic and contemporary role of Asian Americans within that process. Only one of the following may be counted: Asian American Studies 310 (Topic: Race, Identity, and Politics in Asian America), 310 (Topic 2), Government 314 (Topic: Race, Identity and Politics in Asian America), 314 (Topic 7).

**Topic 8: Big Power Politics: Regional Integration in Southeast Asia.** Politics of peace, development, and regional cooperation among the countries of Southeast Asia. Only one of the following may be counted: Asian Studies 301M (Topic: Big Power Politics in Southeast Asia), Government 314 (Topic: Big Power Politics in Southeast Asia), 314 (Topic 8).

Topic 9: Human Rights: Theories and Practices: Government.

Competing viewpoints on issues of human rights from multidisciplinary perspectives. Only one of the following may be counted: English 314J (Topic: Human Rights: Theories and Practices), Government 314 (Topic: Human Rights: Theories and Practices), 314 (Topic 9).

**Topic 10: Classics of Social and Political Thought.** Same as Core Texts and Ideas 302. Explores the origins of social scientific thought in the history of political philosophy and traces the development of one or more of the social sciences in modern times. Focuses on fundamental ideas about human nature, civil society, and politics, explored through reading such authors as Aristotle, Aquinas, Locke, Rousseau, Marx, Weber, Durkheim, and Freud. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Core Texts and Ideas 302, Government 314 (Topic: Classics of Social and Political Thought), 314 (Topic 10).

**Topic 11: Introduction to Politics in East Asia.** Same as Asian Studies 301M (Topic 17). Introduction to politics and political systems of Japan, China, Taiwan, North Korea, and South Korea. Only one of the following may be counted: Asian Studies 301M (Topic: Introduction to Politics in East Asia), 301M (Topic 17), Government 314 (Topic: Introduction to Politics in East Asia), 314 (Topic 11).

#### GOV 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Government.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Government. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

# GOV 320K. United States Constitutional Development: Structures.

Primarily for prelaw students and government majors. A survey of the origin and growth of the American constitutional system, with emphasis on political structures and processes. Three lecture hours a week for one semester. Prerequisite: Six semester hours of lower-division coursework in government.

#### GOV 320L. Arab-Israeli Politics.

Same as Middle Eastern Studies 341 (Topic 5). In-depth study of domestic, regional, and international factors involved in politics in the Middle East, including simulation of diplomatic interaction in the Arab-Israeli conflict. Government 320L and Middle Eastern Studies 341 (Topic 5) may not both be counted. Prerequisite: Upper-division standing.

# GOV 320N. United States Constitutional Development: Rights.

Primarily for prelaw students and government majors. A survey of the origin and growth of the American constitutional system with an emphasis on the development of civil rights and civil liberties in America. Three lecture hours a week for one semester. Government 320N and 357M (Topic: American Constitutional Development II) may not both be counted. Prerequisite: Six semester hours of lower-division coursework in government.

#### GOV 321. American State Politics.

The states as subsystems of the American political system; state political cultures, social-economic environments, federalism, political participation, interest groups, parties, legislatures, executives, courts, and selected public policies. Three lecture hours a week for one semester. Prerequisite: Six semester hours of lower-division coursework in government.

#### GOV 321M. Politics in Japan.

Same as Asian Studies 321M. Survey of postwar Japanese politics; the occupation, governmental institutions, interest groups, protest movements, industrial policy, the government-business relationship, and political and economic reform. Three lecture hours a week for one semester. Asian Studies 321M and Government 321M may not both be counted. Prerequisite: Six semester hours of lower-division coursework in government.

#### GOV 322M. Politics in China.

Same as Asian Studies 322M. Survey of twentieth-century China: historical trends; 1911 revolution; Warlord-Nationalist period; Communist revolution; post-1949 issues; new social and political institutions. Three lecture hours a week for one semester. Only one of the following may be counted: Asian Studies 322M, 361 (Topic: Politics in China), Government 322M. Prerequisite: Six semester hours of lower-division coursework in government.

#### GOV 324J. Governments and Politics of Eastern Europe.

Same as European Studies 348 (Topic 1: Governments and Politics of Eastern Europe) and Russian, East European, and Eurasian Studies 335 (Topic 2: Governments and Politics of Eastern Europe). Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 348 (Topic 1), Government 324J, Russian, East European, and Eurasian Studies 335 (Topic 2). Prerequisite: Six semester hours of lower-division coursework in government.

#### GOV 324L. Governments and Politics of Western Europe.

Same as European Studies 350. Comparative study of peoples, institutions, parties, interest groups, and bureaucracy in the countries

of Western Europe, concentrating on the major political systems of Britain, France, Germany, and Italy. Three lecture hours a week for one semester. European Studies 350 and Government 324L may not both be counted. Prerequisite: Six semester hours of lower-division coursework in government.

#### GOV 325. Political Parties.

Character of the American party system, organization and leadership; pressure politics; the nominating process, campaigns, suffrage, elections, and the expression of public opinion. Three lecture hours a week for one semester. Prerequisite: Six semester hours of lower-division coursework in government.

#### GOV 327L. Public Opinion and American Politics.

The nature of and major influences on public attitudes, the measurement of public opinion, and the role of public opinion in government. Three lecture hours a week for one semester. Prerequisite: Six semester hours of lower-division coursework in government.

# GOV 328L. Introduction to Latin American Government and Politics.

Same as Latin American Studies 337M (Topic 5: Introduction to Latin American Government and Politics). An introductory survey of Latin American political systems: governmental organization, political processes, and current problems. Three lecture hours a week for one semester. Prerequisite: Six semester hours of lower-division coursework in government.

# GOV 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Government.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Government. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### GOV 330K. The American President.

Development of the power and influence of the president; nomination, election, and responsibility; case studies of presidential problems; comparison of president and other executives. Three lecture hours a week for one semester. Prerequisite: Six semester hours of lower-division coursework in government.

#### GOV 331L. Law and Society.

Designed primarily for prelaw students. The role of law in the context of major social issues; legal research and oral argument. Three lecture hours a week for one semester. Prerequisite: Six semester hours of lower-division coursework in government.

#### GOV 335M. Topics in Political Thought.

Intensive examination of selected issues in political thought. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and six semester hours of lower-division coursework in government.

#### **Topic 3: Politics and Reality.**

**Topic 5: Religion in American Political Thought.** Same as Religious Studies 346 (Topic 2: Religion in American Political Thought). **Topic 7: Feminist Theory.** 

**Topic 9: Contemporary American Social Theory.** Same as Philosophy 365 (Topic 5). Only one of the following may be counted: Government 335M (Topic: Social Theory), 335M (Topic 9), Philosophy 365 (Topic 5), Sociology 352M (Topic 8). Additional prerequisite: Upper-division

standing and six semester hours of lower-division coursework in government.

**Topic 10: African American Social and Political Thought.** Same as African and African Diaspora Studies 374D (Topic 21), American Studies 321J, and Core Texts and Ideas 326 (Topic 3). Examines the speeches and writings by major theorists and critics of the prophetic tradition of black political thought. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: African American Social and Political Thought), 374D (Topic 21), American Studies 321 (Topic: African American Social and Political Thought), 321J, Core Texts and Ideas 326 (Topic 3), 335 (Topic: African American Social and Political Thought), 335M (Topic 10). Additional prerequisite: Upperdivision standing and six semester hours of lower-division coursework in government.

**Topic 11: Global Justice.** Overview of contemporary theories on core issues of justice across national borders. Government 335M (Topic: Global Justice) and 335M (Topic 11) may not both be counted. **Topic 12: Natural Law Theory.** Same as Philosophy 342 (Topic 1). Study of the fundamental moral principles that are built into the design of human nature and lie at the roots of conscience. Only one of the following may be counted: Government 335M (Topic: Natural Law Theory), 335M (Topic 12), and Philosophy 342 (Topic: Natural Law Theory), Philosophy 342 (Topic 1). Additional prerequisite: Upperdivision standing and six semester hours of lower-division coursework in government.

**Topic 13: Hegel and the Formation of Modern European Identity.** Same as Core Texts and Ideas 335 (Topic 3) and European Studies 348 (Topic 6). An in-depth study of how Hegel identifies the social conditions necessary for personal self-realization but also for freedom by means of political community. Only one of the following may be counted: Core Texts and Ideas 335 (Topic: Hegel and the Formation of Modern European Identity), 335 (Topic 3), European Studies 348 (Topic: Hegel and the Formation of Modern European Identity), 335 (Topic: Hegel and the Formation of Modern European Identity), 348 (Topic 6), Government 335M (Topic: Hegel and the Formation of Modern European Identity), 335M (Topic 13). Additional prerequisite: Upper-division standing and six semester hours of lower-division coursework in government.

**Topic 14: Intellectual World of the American Founders.** A study of readings about politics, history, economics, ethics, religion, and law and their intellectual influence on founders such as Thomas Jefferson, George Washington, James Madison, and Alexander Hamilton. Three lecture hours a week for one semester. Government 335M (Topic: Intellectual World of the American Founders) and 335M (Topic 14) may not both be counted.

**Topic 15: Politics and Literature.** Same as Core Texts and Ideas 324. Explores the "old battle between the poets and philosophers," in which the two sides battle for recognition as the deepest source of wisdom about politics and ethics. Includes readings from great works of political philosophy and literature. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Core Texts and Ideas 324, Government 335M (Topic: Politics and Literature), 335M (Topic 15). Prerequisite: Upper-division standing and six semester hours of lower-division coursework in government.

**Topic 16: The United States and Third World Feminisms.** Same as African and African Diaspora Studies 372C (Topic 6). Explores the variety of feminisms developed by women of color and non-western women to critique the racism and ethnocentrism of white-dominated systems and practices, including feminism. Only one of the following may be counted: African and African Diaspora Studies 372C (Topic: The US and Third World Feminisms), 372C (Topic 6), 374 (Topic: The US and Third World Feminisms), Government 335M (Topic: The US and Third World Feminisms), 335M (Topic 16), Women's and Gender Studies 340 (Topic: The US and Third World Feminisms).

**Topic 17: Women in the History of Political Thought**. Same as Core Texts and Ideas 335 (Topic 5) and Women's and Gender Studies 345 (Topic 32). Examines the themes of women, the family, and the private sphere in the history of political theory. Only one of the following may be counted: Core Texts and Ideas 335 (Topic: Women in Hist of Polit Thought), 335 (Topic 5), Government 335M (Topic: Women in History of Political Thought), 335M (Topic 17), Women's and Gender Studies 345 (Topic: Women in History of Political Thought), 345 (Topic 32). Additional prerequisite: Upper-division standing and six semester hours of lower-division coursework in government.

## GOV 335N. Topics in American State Government and Politics.

Analysis of varying topics in the study of American state government and politics. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Six semester hours of lower-division coursework in government.

Topic 1: American State Constitutions.

Topic 2: American State Legislatures.

Topic 3: Texas Political History.

**Topic 4: Texas Political Parties and Elections.** An examination of the nature of Texas electoral politics.

**Topic 5: State Politics and Public Policy.** Survey of the revitalization of political institutions in the American states and the implications for the making of public policy.

**Topic 6: American State Politics.** Examination of the political power, policy responsibilities, and institutional capacities of state governments.

**Topic 7: Southern Political History.** Covers the colonial period to the present and includes topics such as progressive nationalism, defensive sectionalism, reconstruction, the civil rights movement, and partisan realignment. Government 335N (Topic 7) and 335N (Topic: Texas and the New Southern Politics) may not both be counted.

#### GOV 335P. Classics of Social Scientific Thought.

Same as Core Texts and Ideas 365. Studies a selection of foundational modern classics in economics, psychology, sociology, political science, and anthropology, drawn mainly from the nineteenth and twentieth centuries. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Core Texts and Ideas 365, Government 335M (Topic: Classics of Social Scientific Thought), 335P. Prerequisite: Upper-division standing.

#### GOV 336M. Governments and Politics of Russia.

Issues of nationalism and state-building facing Russia and its neighbors. Evaluation of the post-Soviet experience from the perspectives of both domestic and foreign policy. Three lecture hours a week for one semester. Government 336M and Russian, East European, and Eurasian Studies 335 (Topic 3: Governments and Politics of Russia) may not both be counted. Prerequisite: Six semester hours of lower-division coursework in government.

# GOV 337M. Topics in Latin American Government and Politics.

In-depth analysis of the governmental process in Latin American countries, and topical treatment of political and administrative patterns across the region. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Six semester hours of lower-division coursework in government.

**Topic 2: Parties, Elections, and Democracy in Latin America.** Same as Latin American Studies 337M (Topic 2). Only one of the following may be counted: Government 337M (Topic: Politics of Development

in Latin America), 337M (Topic 2), 337M (Topic 16), Latin American Studies 337M (Topic: Politics of Development in Latin America), 337M (Topic 2), 337M (Topic 16). Additional prerequisite: Six semester hours of lower-division coursework in government.

**Topic 3: Politics in South America.** Same as Latin American Studies 337M (Topic 3: Politics in South America).

**Topic 6: Politics of Mexico.** Same as Latin American Studies 337M (Topic 11). Survey of twentieth century politics in Mexico with an emphasis on political and economic development. Only one of the following may be counted: Government 337M (Topic: Politics of Mexico), 337M (Topic 6), Latin American Studies 337M (Topic: Politics of Mexico), 337M (Topic 11).

**Topic 7: Law and Democracy in Latin America.** Same as Latin American Studies 337M (Topic 12). Explores many of the challenges to the rule of law across Latin America and how they affect the quality of democracy in the region. Only one of the following may be counted: Government 337M (Topic: Law and Democracy in Latin America), 337M (Topic 7), Latin American Studies 337M (Topic: Law and Democracy in Latin America), 337M (Topic 12).

**Topic 8: International Politics of Latin America.** Same as Latin American Studies 337M (Topic 13). Analysis of Latin America's political and economic relations with respect to external actors since the late twentieth century. Only one of the following may be counted: Government 337M (Topic: International Politics of Latin America), 337M (Topic 8), Latin American Studies 337M (Topic: International Politics of Latin America), 337M (Topic 13).

**Topic 9: Politics, Economy, and Society of Contemporary Brazil.** Same as Latin American Studies 337M (Topic 14). An introduction to Brazil with a focus on domestic politics; economic development and management; social relations and social policy issues; and foreign policy. Only one of the following may be counted: Government 337M (Topic: Politics, Economy, and Society of Contemporary Brazil), 337M (Topic 9), Latin American Studies 337M (Topic: Politics, Economy, and Society of Contemporary Brazil), 337M (Topic 14).

**Topic 16: Politics of Development in Latin America.** Same as Latin American Studies 337M (Topic 16). Examines the struggle for development in Latin America during the last century. Only one of the following may be counted: Government 337M (Topic: Politics of Development in Latin America), 337M (Topic 2), 337M (Topic 16), Latin American Studies 337M (Topic: Politics of Development in Latin America), 337M (Topic 2), 337M (Topic 16). Additional prerequisite: Six semester hours of lower-division coursework in government.

#### GOV 338L. East Asian International Relations.

Same as Asian Studies 338L. Survey of Russian/Soviet, Japanese, Chinese, and American foreign policies of the twentieth century, emphasizing Pacific-region interests; historical policies; intermittent conflicts, such as China versus Japan, Korean War, Indochina Wars; China's emergence as a nuclear power. Three lecture hours a week for one semester. Only one of the following may be counted: Asian Studies 338L, 361 (Topic: East Asian International Relations), Government 338L. Prerequisite: Upper-division standing and six semester hours of lowerdivision coursework in government.

#### GOV 339L. Research Methods in Government.

An introduction to research design, data collection and analysis, and the use of the computer and related equipment. Three lecture hours a week for one semester. Prerequisite: Six semester hours of lower-division coursework in government.

#### GOV 340M. Readings in Government.

Individually guided and supervised readings and research in selected topics in government. Schedule and topic of study determined by student in consultation with instructor. Three lecture hours a week for one semester. Prerequisite: Upper-division standing, six semester hours of lower-division coursework in government, and written consent of instructor and the undergraduate adviser.

#### GOV 341M. Decision Theory.

An introduction to the basic concepts and models using decision theory in political science, with particular emphasis on utility analysis, game theory, coalition formation, and voting behavior. Three lecture hours a week for one semester. Prerequisite: Six semester hours of lower-division coursework in government.

#### GOV 342N. Public Choice.

The political-economic models that have developed in this area of social science. Three lecture hours a week for one semester. Prerequisite: Six semester hours of lower-division coursework in government.

#### GOV 344. American Foreign Relations.

The aims, methods, and accomplishments of United States foreign policy since World War II, by geographic areas and by special problems. Three lecture hours a week for one semester. Prerequisite: Six semester hours of lower-division coursework in government.

#### GOV 344L. Introduction to Comparative Politics.

Introductory survey of basic concepts, perspectives, approaches, and trends in comparative politics, with emphasis on the formal-legal, group, class, elite, political culture, structural-functional, and systems approaches. Three lecture hours a week for one semester. Prerequisite: Six semester hours of lower-division coursework in government.

#### GOV 347K. Governments and Politics of South Asia.

Same as Asian Studies 347K. A survey of political developments, governmental organization, and economic and social problems in South Asia. Three lecture hours a week for one semester. Prerequisite: Six semester hours of lower-division coursework in government.

#### GOV 347L. Introduction to Political Theory.

Study of political theory: what it is; its origins; tradition; political theory today. Three lecture hours a week for one semester. Prerequisite: Six semester hours of lower-division coursework in government.

#### GOV 347N. Governments and Politics of Southeast Asia.

A survey of past and present governments and politics of the entire Southeast Asia region. Three lecture hours a week for one semester. Government 347N and 365L (Topic: Governments and Politics in Southeast Asia) may not both be counted. Prerequisite: Six semester hours of lower-division coursework in government.

#### GOV 348. Government and the American Economy.

Relationship of government to the economic system; past trends and present problems in government policy in the United States. Three lecture hours a week for one semester. Prerequisite: Economics 304L and six semester hours of lower-division coursework in government.

#### GOV 350K. Statistical Analysis in Political Science.

Elementary statistical techniques and their applications to problems in political science. Three lecture hours a week for one semester. Prerequisite: Six semester hours of lower-division coursework in government.

#### GOV 351C. The Classical Quest for Justice.

Same as Core Texts and Ideas 320. Introduces students to classical political thought through a study of seminal works of antiquity, focusing on those of Plato and Aristotle. Three lecture hours a week for one semester. Only one of the following may be counted: Core Texts and Ideas 320, 335 (Topic: Classical Quest for Justice), Government 335M

(Topic: Classical Quest for Justice), 351C. Prerequisite: Completion of at least thirty semester hours of coursework.

#### GOV 351D. The Theoretical Foundations of Modern Politics.

Same as Core Texts and Ideas 321. Examines competing foundations of the ongoing development of political and social modernity. Examines a selection of major authors from Machiavelli to Nietzsche. Three lecture hours a week for one semester. Only one of the following may be counted: Core Texts and Ideas 321, 335 (Topic: The Theoretical Foundations of Modern Politics), Government 335M (Topic: The Theoretical Foundations of Modern Politics), 351D, Western Civilization 320 (Topic: The Theoretical Foundations of Modern Politics). Prerequisite: Completion of at least thirty semester hours of coursework.

#### GOV 351E. Contemporary Political Theory.

Introduces ongoing debates about identity, power, justice, rights, and democracy that are central to the theories of contemporary thinkers from Arendt to Habermas. Three lecture hours a week for one semester. Government 335M (Topic: Contemporary Political Theory) and 351E may not both be counted. Prerequisite: Completion of at least thirty semester hours of coursework.

#### GOV 351G. Critics of Modern Liberalism.

Same as Core Texts and Ideas 322. Selected critics of the philosophy of the Enlightenment from both the Left and the Right, and from the time of Rousseau to the present. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Core Texts and Ideas 322, Government 335M (Topic: Liberalism and its Critics), 351G. Prerequisite: Upper-division standing.

#### GOV 351J. Might and Right among Nations.

Same as Core Texts and Ideas 323. Major alternative approaches to the question of the moral character of international relations, as elaborated by some of the greatest political thinkers. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Core Texts and Ideas 323, 335 (Topic: Might and Right among Nations), Government 335M (Topic: Might and Right among Nations), 351 J, Western Civilization 320 (Topic: Might and Right among Nations). Prerequisite: Upper-division standing and six semester hours of lower-division coursework in government.

#### GOV 351L. Morality and Politics.

Same as Core Texts and Ideas 325. Interdisciplinary readings from major works exploring issues of ethics and leadership. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Core Texts and Ideas 325, Government 335M (Topic: Morality and Politics), 351L. Prerequisite: Upper-division standing.

#### GOV 353D. Darwin and the Politics of Evolution.

Same as Core Texts and Ideas 372. A careful reading of Darwin's influential Origin of the Species by Means of Natural Selection, together with an examination of the religious, political, and scientific controversies the book has inspired from its first publication to the present day. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Core Texts and Ideas 370 (Topic: The Politics of Evolution), 372, Government 335M (Topic: The Politics of Evolution), 353D. Prerequisite: Upper-division standing and six semester hours of lower-division coursework in government.

#### GOV 355M. Topics in Political Science.

Emphasis on varying topics in government and politics of contemporary interest and concern. Three lecture hours a week for one semester. May

be repeated for credit when the topics vary. Prerequisite: Six semester hours of lower-division coursework in government.

#### Topic 1: Human Behavior as Rational Action.

**Topic 2: Applied Research Methods in Political Science.** Introduction to the research process in the social sciences. The primary emphasis is on engaging in research projects, writing research proposals, analyzing data, and presenting research. Government 355M (Topic: Applied Research Methods in Political Science) and 355M (Topic 2) may not both be counted. Prerequisite: Upper-division standing.

#### GOV 355N. World War I in Real Time.

Follows the timeline of World War I events as they happened. Using the tools of political science, engages modern, cutting edge theories and evidence about the origins and conduct of war to address why "the seminal tragedy of modern times" occurred when it did, and what we can learn from it in the present. Three lecture hours a week for one semester. Government 355M (Topic: World War I in Real Time) and 355N may not both be counted. Prerequisite: Upper-division standing and six semester hours of lower-division coursework in government.

#### GOV 355P. Political Sociology.

Same as Sociology 320K. A survey of approaches to the study of the state as a social structure; political power and power systems; ideology; political parties and elites. Three lecture hours a week for one semester. Only one of the following may be counted: Government 355M (Topic: Political Sociology), 355P, Sociology 320K. Prerequisite: Upper-division standing.

#### GOV 357L. Judicial Process and Behavior.

Introduction to traditional and modern approaches to the study of the judicial process, with emphasis on the nature and origin of judicial decisions and the factors that affect judicial decision making. Three lecture hours a week for one semester. Prerequisite: Six semester hours of lower-division coursework in government.

#### GOV 357M. Topics in Public Law.

Intensive study of various aspects of law and the legal system. Three lecture hours or two lecture hours and one discussion hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Six semester hours of lower-division coursework in government.

**Topic 1: Gender-Based Discrimination.** Same as American Studies 370 (Topic 6: Gender-Based Discrimination) and Women's and Gender Studies 345 (Topic 8: Gender-Based Discrimination). Studies the substance of laws that relate to gender-based roles, and the participation of women in the legal process. Three lecture hours a week for one semester. Additional prerequisite: Upper-division standing, six semester hours of lower-division coursework in government, a University grade point average of at least 3.50, and consent of department received prior to registering.

**Topic 3: Supreme Court and Public Policy.** Two lecture hours and one discussion hour a week for one semester.

**Topic 4: Civil Liberties.** Three lecture hours a week for one semester. **Topic 5: Constitutional Interpretation.** Same as Core Texts and Ideas 326 (Topic 1). Designed to improve reasoning and communication skills through constitutional interpretation. Determining what the Constitution means, how to determine what it means, and who should determine what it means. Only one of the following may be counted: Core Texts and Ideas 326 (Topic 1), Government 357M (Topic: Constitutional Interpretation), 357M (Topic 5). Prerequisite: Six semester hours of lower-division coursework in government.

**Topic 6: Constitutional Politics, Law, and Citizenship.** Examination of the development of constitutional order and the debates over

citizenship and civic membership. Three lecture hours a week for one semester. Asian American Studies 325 (Topic: Constitutional Politics, Law, and Citizenship) and Government 357M (Topic 6) may not both be counted.

**Topic 7: Constitutional Structure of Power.** Examination of the power of federal and state governments, the emergency power of the executive branch, and the authority of the Supreme Court. Three lecture hours a week for one semester.

**Topic 8: Structure of Individual Liberties.** Study of individual rights protected by the Constitution, with an emphasis on the United States Supreme Court. Three lecture hours a week for one semester.

**Topic 9: Asian American Jurisprudence.** Same as American Studies 321 (Topic 5: Asian American Jurisprudence) and Asian American Studies 325 (Topic 5: Asian American Jurisprudence). Introduction to the study of Asian Americans and the law. Examines the historical development of United States law and its relationship to Asian Americans, and of Asian American jurisprudence as an independent field of legal scholarship. Three lecture hours a week for one semester. Additional prerequisite: Upper-division standing.

**Topic 10: Law of Politics.** Study of current theoretical and philosophical issues at the intersection of law and politics. Three lecture hours a week for one semester. Government 357M (Topic: Law of Politics) and 357M (Topic 10) may not both be counted. Additional prerequisite: Six semester hours of lower-division coursework in government.

**Topic 11: The Face of Justice.** Same as Women's and Gender Studies 345 (Topic 47). Examination of the inalienable rights: liberty, due process, equality, speech, assembly, security in the home, and practice or nonpractice of religion. Historical overview of women's rights and women's participation in the justice system. Discussion of individuals whose rights are being protected, and those whose rights are being overlooked by the American judicial system. Only one of the following may be counted: Government 357M (Topic: Face of Justice), 357M (Topic 11), Liberal Arts Honors 350 (Topic: Face of Justice), Women's and Gender Studies 345 (Topic: Face of Justice), 345 (Topic 47). Prerequisite: For government majors, six semester hours of lower-division coursework in government; for others, upper-division standing.

**Topic 12: Constitutional Design.** Examines the design and implementation of national constitutions and the problems of creating foundational charters. Only one of the following may be counted: Government 357M (Topic: Constitutional Design), 357M (Topic 12), Tutorial Course 357 (Topic: Constitutional Design).

#### GOV 358. Introduction to Public Policy.

A survey of American public policy, with emphasis on modern problems and trends. Three lecture hours a week for one semester. Prerequisite: Six semester hours of lower-division coursework in government.

#### GOV 360N. Topics in International Relations.

Special studies stressing the theoretical aspects or the substantive policy problems of international politics. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and six semester hours of lowerdivision coursework in government.

#### Topic 1: America in Decline?.

Topic 2: Causes of War. Same as Russian, East European, and Eurasian Studies 335 (Topic 21). Only one of the following may be counted: Government 360N (Topic 2), Russian, East European, and Eurasian Studies 335 (Topic: Causes of War), 335 (Topic 21). Topic 3: International Organization. In-depth introduction to the theory and practice of international organizations. Government 360N (Topic: International Organizations) and 360N (Topic 3) may not both be counted. **Topic 4: Understanding the Cold War.** Same as Russian, East European, and Eurasian Studies 335 (Topic 15: Understanding the Cold War). Additional prerequisite: Upper-division standing and six semester hours of lower-division coursework in government.

Topic 8: Democracy, War, and Peace.

#### **Topic 9: Force and Politics.**

**Topic 10: Introduction to International Relations.** Asian Studies 361 (Topic: Introduction to International Relations Theory) and Government 360N (Topic 10) may not both be counted.

**Topic 11: International Political Economy.** Study of the changing relationship between political and economic power in international relations.

**Topic 12: International Security.** Comprehensive survey of conventional security issues, including causes of war, ethnic conflict, and terrorism.

**Topic 13: Global Governance.** Examines the forces that shape global stability and instability. Government 360N (Topic: Global Governance) and 360N (Topic 13) may not both be counted.

**Topic 14: International Politics of Economic Crisis.** Examines the international political causes and consequences of key economic crises in the twentieth century. Government 360N (Topic: International Politics of Economic Crisis) and 360N (Topic 14) may not both be counted.

**Topic 16: Civil Wars and Ethnic Violence.** Study of the ethnic conflicts and civil wars that pose the greatest threats to international peace and security today. Government 360N (Topic: Civil Wars and Ethnic Violence) and 360N (Topic 16) may not both be counted.

**Topic 17: Terrorism and Counterterrorism.** Examines the historical origins of terrorist violence, the primary causes of terrorist acts committed both by opposition and government forces, as well as counter terrorist measures taken by states and international organizations. Government 360N (Topic: Terrorism and Counterterrorism) and 360N (Topic 17) may not both be counted.

#### GOV 362L, 662L. Government Research Internship.

Fieldwork in research and analysis on governmental and political problems. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. Only six semester hours of an internship course in government may be counted toward a major in government. Prerequisite: Six semester hours of lower-division coursework in government and consent of instructor.

#### GOV 662N. Archer Center Washington Internship.

Fieldwork in research and analysis on governmental and political problems. The equivalent of six lecture hours and twenty fieldwork hours a week for one semester. Prerequisite: Thirty semester hours of coursework and consent of instructor.

#### GOV 365L. Studies in Asian Politics.

Special studies of political behavior and institutions, problems, or developments in individual countries or in the region. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Six semester hours of lower-division coursework in government.

#### Topic 1: Politics of Economic Development in East Asia.

**Topic 2: Japanese Foreign Policy.** Same as Asian Studies 361 (Topic 22: Japanese Foreign Policy). An introduction to the foreign and domestic determinants of Japanese foreign policy.

**Topic 3: International Relations of East and Southeast Asia.** Same as Asian Studies 361 (Topic 23: International Relations of East and Southeast Asia). An introduction to the international relations of East and Southeast Asia, with particular attention to postwar economic and security issues, the changing political landscape of the post-

Cold War period, and the development and functions of regional institutions.

**Topic 4: Political Economy of Asia.** Same as Asian Studies 361 (Topic 36). Explores the political economies of East Asia with an emphasis on Japan, China, South Korea, and Taiwan. Only one of the following may be counted: Asian Studies 361 (Topic: Political Economy of Asia), 361 (Topic 36), Government 365L (Topic: Political Economy of Asia), 365L (Topic 4).

**Topic 5: Asian Regionalism and Multilateral Cooperation.** Same as Asian Studies 361 (Topic 40). Addresses the nature, functional principles, leadership, and policy-making process of contemporary Asian regionalism in comparison to the experiences of European integration. Only one of the following may be counted: Asian Studies 361 (Topic: Asian Regionalism and Multilateral Cooperation), 361 (Topic 40), Government 365L (Topic: Asian Regionalism and Multilateral Cooperation), 365L (Topic 5). Additional prerequisite: Upper-division standing and six semester hours of lower-division coursework in government.

**Topic 6: China and the New Asian Region.** Same as Asian Studies 361 (Topic 13). Foreign policy issues in China, Asia, and Eastern Russia. Only one of the following may be counted: Asian Studies 361 (Topic: China and the New Asian Region), 361 (Topic 13), Government 365L (Topic: China and the New Asian Region), 365L (Topic 6).

**Topic 7: Rights and the State in South Asia.** Same as Asian Studies 361 (Topic 37). A study of states and societies in South Asia and the challenge of creating rights and respecting political orders. Only one of the following may be counted: Asian Studies 361 (Topic: Rights and the State in South Asia), 361 (Topic 37), Government 365L (Topic: Rights and the State in South Asia), 365L (Topic 7).

#### GOV 365N. Topics in Comparative Politics.

Analysis of varying topics in the comparative study of political processes. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Politics in Contemporary Africa.** Same as African and African American Studies 365. Additional prerequisite: Six semester hours of lower-division coursework in government.

Topic 2: Immigration and Comparative Politics. Prerequisite: Six semester hours of lower-division coursework in government. Topic 3: The Military in Politics. Only one of the following may be counted: Government 365N (Topic 3); Latin American Studies 337M (Topic 9: The Military in Politics); Russian, East European, and Eurasian Studies 335 (Topic 10: The Military in Politics). Prerequisite: Six semester hours of lower-division coursework in government.

**Topic 4: Political Development in Eastern Europe and Latin America.** Same as Latin American Studies 337M (Topic 6). Government 365N (Topic 4) and Latin American Studies 337M (Topic 6) may not both be counted. Additional prerequisite: Six semester hours of lower-division coursework in government.

**Topic 9: International Environmental Policy.** Prerequisite: Six semester hours of lower-division coursework in government.

**Topic 10: Australian Society and Politics.** Prerequisite: Six semester hours of lower-division coursework in government.

**Topic 11: Political Transition in Europe and Latin America.** Same as European Studies 361 (Topic 21: Political Transition in Europe and Latin America) and Latin American Studies 337M (Topic 10: Political Transition in Europe and Latin America). Only one of the following may be counted: Government 365N (Topic 11), Latin American Studies 337M (Topic 10). Additional prerequisite: Six semester hours of lowerdivision coursework in government.

**Topic 12: Globalization in the Middle East and North Africa.** A comparison of economic and political development strategies in the

countries of the Middle East and North Africa. Additional prerequisite: Six semester hours of lower-division coursework in government. **Topic 13: Politics of New Democracies.** Same as Latin American Studies 337M (Topic 15) and Russian, East European, and Eurasian Studies 335 (Topic 22). Examination of the process of democratization and factors related to its success. Only one of the following may be counted: Government 365N (Topic 13), Latin American Studies 337M (Topic: Politics of New Democracies), 337M (Topic 15), Russian, East European, and Eurasian Studies 335 (Topic: Politics of New Democracies), 335 (Topic 22). Prerequisite: For government majors, six semester hours of lower-division coursework in government; for others, upper-division standing.

**Topic 14: Politics of the Welfare State.** Introductory survey of trends in welfare state development in North America, Western Europe, and Australia.

**Topic 15: Suicide Terrorism.** Studies the causes of suicide terrorism at elite, community, and rank-and-file levels. Only one of the following may be counted: Government 365N (Topic: Suicide Terrorism), 365N (Topic 15), Islamic Studies 372 (Topic: Suicide Terrorism), Middle Eastern Studies 341 (Topic: Suicide Terrorism).

**Topic 16: Israel: Society and Politics.** Same as Jewish Studies 365 (Topic 10). Analysis of Israeli politics and society in a comparative perspective with a major focus on the social and political cleavages in Israel. Only one of the following may be counted: Government 365N (Topic: Israel: Society and Politics), 365N (Topic 16), Jewish Studies 361 (Topic: Israel: Society and Politics), 365 (Topic: Israel: S

Topic 17: Issues in Third World Development. Examines economic, sociological, and political frameworks for understanding some of the major constraints to and opportunities for advancement in developing societies. Government 365N (Topic: Issues in Third World Development) and 365N (Topic 17) may not both be counted. Topic 18: Comparative Political Institutions. Introduction to the

concept and role of political institutions including constitutions, electoral systems, federalism, and the court system. Government 365N (Topic: Comparative Political Institutions) and 365N (Topic 18) may not both be counted.

**Topic 19: German Nationalisms.** Same as European Studies 346 (Topic 22), German, Scandinavian, and Dutch Studies 361K, and Russian, East European, and Eurasian Studies 335 (Topic 20). History of diverse views and movements regarding German national identity within their respective contexts, 1800-present. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic: German Nationalisms), 346 (Topic 22), German, Scandinavian, and Dutch Studies 361K, Germanic Civilization 360E (Topic 3), Government 365N (Topic 6), 365N (Topic 19), Russian, East European and Eurasian Studies 335 (Topic: German Nationalisms), 335 (Topic 20). Additional prerequisite: Upper-division standing.

**Topic 20: European Environmental Politics.** Same as European Studies 348 (Topic 3). The history of environmental politics in both the member states of the European Union and the EU itself, including conceptual treatment of general environmental politics and policies, history of European environmentalism, and institutional responses at important 'traditional' and new EU member states. Also examines EU environmental policies themselves, such as the EU Emissions Trading System, chemicals policy, and GMO policy. Only one of the following may be counted: European Studies 348 (Topic: European Environmental Politics), 348 (Topic 3), Government 365N (Topic: European Environmental Politics), and 365N (Topic 20). Prerequisite: Upper-division standing.

**Topic 21: Comprehensive Notions of European Security.** Same as European Studies 348 (Topic 4). Examines the conceptual and practical aspects of European comprehensive security via the institutions charged with implementing it: the European

Union (EU), the North Atlantic Treaty Organization (NATO), and the Organization for Security and Cooperation in Europe (OSCE). Only one of the following may be counted: European Studies 348 (Topic: Comprehensive Notions of European Security), 348 (Topic 4), Government 365N (Topic: Comprehensive Notions of European Security), 365N (Topic 21). Prerequisite: Upper-division standing. Topic 23: Comparative Legal Systems. Comparative study of the nature of courts and law, their position in political systems, and their potential impact on society. Government 365N (Topic: Comparative Legal Systems) and 365N (Topic 23) may not both be counted. Topic 24: Human Rights and World Politics. Introduction to the political and policy dimensions of human rights. Only one of the following may be counted: Government 365N (Topic: Human Rights and World Politics), 365N (Topic 24), Women's and Gender Studies 340 (Topic: Human Rights and World Politics). Prerequisite: Upper-division standing

**Topic 25: The European Union and Regional Integration.** Same as European Studies 348 (Topic 5). Designed to provide a detailed introduction to the European Union, one of America's major economic and political partners and one of the major actors in contemporary international relations. Only one of the following may be counted: European Studies 348 (Topic: European Union and Regional Integration), 348 (Topic 5), Government 365N (Topic: European Union and Regional Integration), 365N (Topic 25). Additional prerequisite: Upper-division standing.

#### GOV 365P. The Politics of Oil.

The national and international political complexities of petroleum; relationship of trends in petroleum economics to international political alignments. Three lecture hours a week for one semester. Prerequisite: Six semester hours of lower-division coursework in government.

#### GOV 365Q. Comparative Political Parties.

Analysis of varying topics in the comparative study of political processes. Three lecture hours a week for one semester. Government 365N (Topic: Comparative Political Parties) and 365Q may not both be counted. Prerequisite: Six semester hours of lower-division coursework in government.

#### GOV 370K. Racial and Ethnic Politics.

An examination of the role of racial and ethnic minorities in politics and of the impact of politics on these minorities. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Six semester hours of lower-division coursework in government.

**Topic 2: Latino Politics.** Same as Mexican American Studies 374 (Topic 15: Latino Politics) and Latin American Studies 337M (Topic 8: Latino Politics).

**Topic 3: African American Politics.** Same as African and African Diaspora Studies 374D (Topic 13). The evolution and role of African American politics within the American political system. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: African American Politics), 374D (Topic 13), Government 370K (Topic 3).

**Topic 4: The Black Church in African American Politics.** Same as African and African Diaspora Studies 374D (Topic 14) and Religious Studies 346 (Topic 7). Examination of the political role of the black church and its leaders in the development of African American political behavior. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: Black Church in African American Politics), 374D (Topic 14), Government 370K (Topic 4), Religious Studies 346 (Topic: Black Church in African American Politics), 346 (Topic 7). **Topic 5: Race and Democracy.** Examination of multicultural and multiracial influences on democratic societies. Only one of the following may be counted: African and African Diaspora Studies 374 (Topic: Race and Democracy), 374D (Topic: Race and Democracy), Government 370K (Topic 5).

#### GOV 370L. Topics in American Government and Politics.

Analysis of varying topics in the study of American government and politics. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Six semester hours of lowerdivision coursework in government.

#### Topic 1: Election Campaigns.

**Topic 2: Leadership in America.** Same as American Studies 370 (Topic 10: Leadership in America) and Women's and Gender Studies 345 (Topic 34: Leadership in America). Introduction to the concepts of leadership and the application of those concepts in public and political leadership. Additional prerequisite: Upper-division standing, six semester hours of lower-division coursework in government, a University grade point average of at least 3.50, and consent of department received prior to registering.

Topic 3: Bureaucracy in America.

Topic 5: Parties and Electoral Politics in the United States.

Topic 6: Politics of Hollywood.

Topic 7: The United States Congress.

Topic 8: Congress and the Executive Branch.

Topic 9: Social Movements: Theory and Practice.

Topic 10: Congress and the Presidency.

Topic 11: Urban Politics. Same as Urban Studies 350 (Topic 1: Urban Politics).

**Topic 12: Congressional Elections.** Examination of congressional campaigns and election outcomes from both historical and contemporary perspectives.

**Topic 13: Leaders and Followers in American Politics.** Examination of the relationship between elected officials and voters.

**Topic 14: The News Media as a Political Institution**. Analysis of the role of the news media in American politics and the operation of national government. Government 370L (Topic 14) and Urban Studies 350 (Topic: News Media as a Political Institution) may not both be counted.

**Topic 15: Political Communication.** Introduction to the impact of modern forms of communication on American governance.

**Topic 16: Political Psychology.** Study of the role of psychological theories in understanding politics and forming political views. **Topic 17: Money in United States Politics.** Study of the nature and consequences of campaign finance on American politics. Government

370L (Topic 17) and 379S (Topic: Money in Politics--Honors) may not both be counted.

**Topic 18: Politics and the Economy.** Survey of the relationship between politics and market behavior in democracies.

**Topic 19: The United States as a Territorial Nation**. Examination of the history, public policy, law, and political philosophy behind United States territories and land acquisitions.

**Topic 20: Campaigns and Elections.** Introduction to American political campaigns and elections with a focus on federal elections. Government 370L (Topic: Campaigns and Elections) and 370L (Topic 20) may not both be counted.

**Topic 21: Politics of Food in America.** Examines the political history, current law and practices, and ethics and philosophy of how food is produced and consumed in the United States. Government 370L (Topic: Politics of Food in America) and 370L (Topic 21) may not both be counted.

**Topic 22: President, Congress, and the Supreme Court.** An examination of the political relationship of the President, Congress and the Supreme Court in the American constitutional order.

Government 370L (Topic: President, Congress, and Court) and 370L (Topic 22) may not both be counted. Additional prerequisite: **Topic 23: The Politics of Health Care.** The role of political institutions and the public in the development of the American health care system. Government 370L (Topic: The Politics of Health Care) and 370L (Topic 23) may not both be counted.

**Topic 26: The Presidency in the Constitutional Order.** Explores the thought that national politics has become more prone to institutional and partisan conflict, policy gridlock and that national institutions do not function as intended. Government 370L (Topic: The Presidency in the Constitutional Order) and 370L (Topic 26) may not both be counted. Prerequisite: Upper-division standing.

**Topic 27: American Political Development.** Examines a number of subjects and methods used in the application of political science to American history. Government 370L (Topic: American Political Development) and 370L (Topic 27) may not both be counted. Prerequisite: Upper-division standing.

#### GOV 370M. Research on the United States Congress.

Independent research on lawmaking in the modern United States Congress. Individual instruction. Prerequisite: Six semester hours of lower-division coursework in government.

#### GOV 370P. Policy-Making Process.

Focus on the role of Congress and the President in the policy-making process. Three lecture hours a week for one semester. Government 370L (Topic: Policy-Making Process) and 370P may not both be counted. Prerequisite: Upper-division standing.

#### GOV 371N, 671N. Administrative Internship.

Students perform research and related activities in a national, state, or local administrative agency. Written reports required. The equivalent of three or six lecture hours a week for one semester. Only six semester hours of an internship course in government may be counted toward a major in government. Prerequisite: Twelve semester hours of coursework in government and consent of instructor.

#### GOV 372N, 672N. Campaigns and Elections Internship.

Students perform research and related activities in political campaigns and polling. Written reports required. The equivalent of three or six lecture hours a week for one semester. Only six semester hours of an internship course in government may be counted toward a major in government. Prerequisite: Twelve semester hours of coursework in government and consent of instructor.

#### GOV 373N, 673N. Legislative Internship.

Students perform research and related activities in a national, state, or local legislature. Written reports required. The equivalent of three or six lecture hours a week for one semester. Only six semester hours of an internship course in government may be counted toward a major in government. Prerequisite: Twelve semester hours of coursework in government and consent of instructor.

#### GOV 374N. Political Internship.

Students perform research and related activities for an entity directly related to government and politics. Written reports required. The equivalent of three lecture hours a week for one semester. Only six semester hours of an internship course in government may be counted toward a major in government. Prerequisite: Twelve semester hours of coursework in government.

#### GOV 679H. Honors Tutorial Course.

Lectures and supervised individual research and the writing of a substantial paper on a special topic in the field of government. No grade is awarded until the student has completed the two-semester sequence. Three lecture hours a week for two semesters. Prerequisite: For 679HA, upper-division standing, admission to the Government Honors Program, and written consent of the Government Honors Program adviser; for 679HB, Government 679HA.

#### GOV 379S. Honors Seminar.

Substantive focus varies each semester. Topics include but are not limited to constitutional interpretation, political thought, the evolution of American politics, and comparative politics. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Completion of thirty semester hours of coursework, including at least six hours of government.

**Topic 2: Politics in Fiction.** Examination of perspectives on American politics and government through works of fiction. Only one of the following may be counted: Government 379S (Topic: Politics in Fiction), 379S (Topic 2), Liberal Arts Honors 350 (Topic: Politics in Fiction).

**Topic 3: Regime Perspectives on American Politics.** Seminar on American politics and culture which examines how the parts of America fit together to become a whole polity. Only one of the following may be counted: Core Texts and Ideas 326 (Topic: Regime Perspectives on America Politics), 335 (Topic: Regime Perspectives on America Politics), Government 379S (Topic: Regime Perspectives on American Politics), 379S (Topic 3), Liberal Arts Honors 350 (Topic: Regime Perspectives on America Politics).

**Topic 4: Jerusalem and Athens.** Examines the age-old confrontation between the teaching of the Bible and the politics and philosophy of the ancient Greeks. Only one of the following may be counted: Core Texts and Ideas 335 (Topic: Jerusalem and Athens), Government 379S (Topic: Jerusalem and Athens), 379S (Topic 4), Liberal Arts Honors 350 (Topic: Jerusalem and Athens).

### Health and Society Program

### Health and Society: H S

### **Lower-Division Courses**

#### H S 301. Introduction to Health and Society.

Same as Sociology 308S. A broad, multidisciplinary overview that introduces students to the study of health and society. Three lecture hours a week for one semester. Only one of the following may be counted: Health and Society 301, Sociology 308 (Topic: Introduction to Health and Society), 308S.

#### H S 310P. Physical Activity and Society.

Same as Sociology 302P. Explores the way in which people are physically active in a social context - primarily in the United States. Examines how social forces influence physical activity including cultural, economic, historical, and demographic considerations. Examines physical activity on both the individual and population levels to better understand benefits and barriers to activity through the social context. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 302P, 304 (Topic: Physical Activity and Society), Health and Society 310P.

### **Upper-Division Courses**

#### H S 320. Social Worth, Ethical Dilemmas, and Health Care.

Explores how the resolution of ethical dilemmas and the assessment of social worth influence the organization and distribution of health care. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### H S 330. Health Care Policy in the United States.

An overview of the health care system in the United States and analysis of health policy issues primarily from the perspective of health economics. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Health and Society 330, Public Health 358D, Sociology 358D. Prerequisite: Upper-division standing.

#### H S 340. Topics in Health and Society.

Selected topics on health and society. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites may vary with the topic.

**Topic 1: Foundations of Epidemiology.** Same as Health Education 343. Introduction to the basic tenets of epidemiology as well as the different types of epidemiological study designs. Three lecture hours a week for one semester. Health Education 343 and Health and Society 340 (Topic 1) may not both be counted. Additional prerequisite: Consent of instructor.

**Topic 6: Cancerland.** Same as Sociology 320C. Explores the social and cultural terrain of cancer research, treatment, and public policy in the United States. Three lecture hours a week for one semester. Only one of the following may be counted: Health and Society 340 (Topic 6), Sociology 320C, 321K (Topic: Cancerland). Additional prerequisite: Upper-division standing.

**Topic 7: Contemporary Practice of Medicine.** Explores what it means to be a practicing physician in contemporary America. Structured as a series of guest lectures by doctors from different medical specialties and at different stages in their careers; physician scientists and academicians; hospital administrators and related professionals; providers of medical care from international settings; and ethicists. Three lecture hours a week for one semester. Health and Society 340 (Topic 7) and Sociology 321K (Topic: Contemporary Practice of Medicine) may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 8: Economic Sociology of Health.** Same as Sociology 322J. Provides a look at the economics of health and health care through a sociological lens. Examines how the multidimensional nature and distribution of health and healthcare are shaped by a variety of social and economic factors. Gain an understanding of the power of incentives, markets, and cost-benefit analysis, as well as the limits of these tools, in creating effective health care policy. Three lecture hours a week for one semester. Only one of the following may be counted: Health and Society 340 (Topic 8), Sociology 321K (Topic: Economic Sociology of Health), 322J. Additional prerequisite: Upper-division standing

**Topic 9: Valuing Mental Health.** Explores the value of health in general and mental health specifically. Comparison of notions of health and illness, non-communicable disease and mental illness, and relative valuations in health and mental health. Development of sound, sensitive, and defensible opinions about mental health through the use of plays, poems, songs, videos, short stories, and personal accounts of illness and disability. Three lecture hours a week for one semester Health and Society 340 (Topic 9) and Sociology 321K (Topic: Valuing Mental Health) may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 11: Medical Sociology.** Same as Sociology 341C. Explores the social context of health, illness, and the health care system in American society. Discussion of the processes of medicalization and demedicalization, social factors influencing health and health care, the organization of the health care delivery system and patient outcomes, and the social meaning and experiences of illness. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 321K (Topic: Medical Sociology), 341C,

or Health and Society 340 (Topic 11). Additional prerequisite: Upperdivision standing.

#### H S 377R. Advanced Research in Health and Society.

Three lecture hours a week for one semester. Prerequisite: Upper-division standing; Health and Society 301 with a grade of at least B- and one of the following with a grade of at least B-: Biology 318M, Educational Psychology 371, Geography 310C, Sociology 317L, Statistics and Data Sciences 302, 304, 318, (or Statistics and Scientific Computation 302, 304, 318), Social Work 318.

#### H S 378. Seminar in Health and Society.

Focuses on a key topic or debate within the Health and Society area of study and develops students' abilities to use data and write a research or policy paper that informs that topic or debate. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and Health and Society 301.

#### H S 679H. Honors Tutorial Course.

A supervised conference course to provide training in research and writing. The equivalent of three lecture hours a week for two semesters. Offered on the letter-grade basis only. Prerequisite: For 679HA, upperdivision standing and admission to the honors program in Health and Society; for 679HB, Health and Society 679HA.

### **Department of History**

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

### **History: HIS**

### **Lower-Division Courses**

#### HIS 301F. The Premodern World.

Survey of world history from human origins to the sixteenth century. Three lecture hours or two lecture hours and one discussion hour a week for one semester. History 301F and 306N (Topic: Premodern World) may not both be counted.

#### HIS 301J. Globalization: A Modern History.

Survey of world history from the sixteenth century to the present. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: History 301G, 301J, 306N (Topic: Modern World).

#### HIS 302C. Introduction to China.

Same as Asian Studies 302C. Introduction to Chinese civilization, past and present, including religion, literature, arts, philosophy, and history. Three lecture hours a week for one semester. Only one of the following may be counted: Asian Studies 302C, History 302C, 306N (Topic: Introduction to China).

# HIS 304K (TCCN: HIST 2313). English Civilization before 1603.

Survey of English civilization from Roman times to the death of Queen Elizabeth I. Three lecture hours a week for one semester.

#### HIS 304L (TCCN: HIST 2314). English Civilization since 1603.

Survey of English history from the seventeenth century to the present. Three lecture hours a week for one semester.

#### HIS 304R. Judaism, Christianity, and Islam: An Introduction.

Same as Islamic Studies 311 (Topic 2: Judaism, Christianity, and Islam: An Introduction), Jewish Studies 311 (Topic 2: Judaism, Christianity, and Islam: An Introduction), and Religious Studies 304. Examines the intertwined historical developments of the religions of Judaism, Christianity, and Islam, and explores the principal beliefs and practices of Jews, Christians, and Muslims. Three lecture hours a week for one semester.

#### HIS 305K. History of East Asia to 1800.

Same as Asian Studies 301M (Topic 3: History of East Asia to 1800). A survey of the traditional history and culture of China, Japan, Korea, and Vietnam. Three lecture hours a week for one semester.

#### HIS 305L. History of East Asia since 1800.

Same as Asian Studies 301M (Topic 4: History of East Asia since 1800). A survey of the modern history of China, Japan, Korea, and Vietnam. Three lecture hours a week for one semester.

### HIS 306K. Introduction to the Middle East: Religious, Cultural, and Historical Foundations.

Same as Middle Eastern Studies 301K and Religious Studies 314K. A survey of the history and civilization of the Middle East from the sixth to the fourteenth century. Three lecture hours a week for one semester. Only one of the following may be counted: History 306K, Middle Eastern Studies 301K, Religious Studies 314 (Topic: Intro M East: Rel/Cul/Hist Fnd), 314K.

#### HIS 306N. Topics in History.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

Topic 3: Key Ideas and Issues in Latin America. Same as Latin American Studies 301. Broad introductory course to acquaint students with the main areas of interest in Latin American studies. Topic 4: Introduction to Russian, East European, and Eurasian Studies: History. History 306N (Topic 4) and Russian, East European, and Eurasian Studies 301 may not both be counted.

**Topic 5: Introduction to the Middle East: Adjustment and Change in Modern Times.** Same as Government 314 (Topic 3) and Middle Eastern Studies 301L. The responses of the societies of the Middle East and North Africa (Turkey, Iran, Afghanistan, Israel, and the Arab world) to Western cultural and political challenges, primarily since about 1800. Three lecture hours a week for one semester. Only one of the following may be counted: Government 314 (Topic 3), History 306N (Topic 5), Middle Eastern Studies 301L.

Topic 7: Introduction to Islam. Same as Asian Studies 301M (Topic 15), Islamic Studies 310, and Religious Studies 319. The beliefs, theology, history, and main social and legal institutions of Islam, including the concept of God and society, the role of women, and Islamic government and movements. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Asian Studies 301M (Topic 15), History 306N (Topic 7), Islamic Studies 310, Religious Studies 319. Topic 10: Jewish Civilization: Beginnings to 1492. Same as Jewish Studies 304M, Middle Eastern Studies 310 (Topic 6), and Religious Studies 313M. Introduction to the history, culture, and religion of the Jewish people from around 1000 BC to the end of the medieval period. Subjects may include ancient Israel, late Second Temple sectarianism, the rise of Christianity, rabbinic Judaism, medieval Jewish philosophy, Jewish mysticism, and Hebrew poetry. Three lecture hours a week for one semester. Only one of the following may be counted: History 306N (Topic: Jewish Civilization I), 306N (Topic 10), Jewish Studies 304M, 311 (Topic: Jewish Civilization I), Middle Eastern Studies 310 (Topic:

Jewish Civilization: Beginnings to 1492), 310 (Topic 6), Religious Studies 313 (Topic: Jewish Civilization I), 313M.

**Topic 11: Jewish Civilization: 1492 to the Present.** Same as European Studies 306 (Topic 4), Jewish Studies 304N, and Religious Studies 313N. Subjects may include trends toward secularization, the emancipation of European Jewry, the emergence of American Jewry, the Holocaust, the establishment of the State of Israel, and the Arab-Israeli conflict. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 306 (Topic: Jewish Civilization: 1492 to the Present), 306 (Topic 4), History 306N (Topic 11), Jewish Studies 304N, 311 (Topic: Jewish Civilization: 1492 to the Present), Religious Studies 313 (Topic: Jewish Civilization: 1492 to the Present), 313N.

**Topic 12: Introduction to Modern North Africa.** Introduction to the major themes of North African history from the sixteenth century to the present. History 306N (Topic: Introduction to Modern North Africa) and 306N (Topic 12) may not both be counted.

Topic 13: Introduction to the History and Culture of Spain. Same as Ancient History and Classical Civilization 310 (Topic 1) and European Studies 306 (Topic 2). The history of Spain from its beginnings in the stone age through the great social and economic upheavals of the twentieth century. Three lecture hours a week for one semester. Only one of the following may be counted: Ancient History and Classical Civilization 310 (Topic: Introduction to the History and Culture of Spain), 310 (Topic 1), European Studies 306 (Topic: Introduction to the History and Culture of Spain), 306 (Topic 2), History 306N (Topic: Introduction to the History and Culture of Spain), 306N (Topic 13). Topic 14: Prague, Magic, and the Struggle for Power. Same as Russian, East European, and Eurasian Studies 302 (Topic 2). Examines historical texts from four different magical traditions to find the truth behind the fiction and the historical events that sometimes permitted and sometimes persecuted the religions, philosophies, and sciences that some call magic. Only one of the following may be counted: Czech 301K (Topic: Magic and Power in Prague: The Struggle for Power), 301K (Topic 2), History 306N (Topic: Magic and Power in Prague: The Struggle for Power), 306N (Topic 14), Religious Studies 306 (Topic: Magic and Power in Prague: The Struggle for Power), Russian, East European, and Eurasian Studies 302 (Topic: Magic and Power in Prague: The Struggle of Power), 302 (Topic 2). Topic 15: History of Human Sexuality. Same as Women's and Gender Studies 301 (Topic 28). The history of human sexuality is approached

from four angles: sexual behaviors; sexual consequences; sexual regulation, and sexual science. Only one of the following may be counted: History 306N (Topic: History of Human Sexuality), 306N (Topic 15), Women's and Gender Studies 301 (Topic: History of Human Sexuality), 301 (Topic 28).

#### HIS 307C. Introduction to the History of India.

Same as Asian Studies 307C. Survey of the history of the Indian subcontinent from prehistoric times to the present. Three lecture hours a week for one semester.

# HIS 309K (TCCN: HIST 2311). Western Civilization in Medieval Times.

Survey of medieval Europe from late antiquity to the fifteenth century. Three lecture hours a week for one semester.

### HIS 309L (TCCN: HIST 2312). Western Civilization in Modern Times.

Survey of European civilization since the fifteenth century. Three lecture hours a week for one semester.

#### HIS 310. Introduction to Modern Africa.

Same as African and African Diaspora Studies 310K. Introduction to modern Africa, with focus on colonial and postcolonial development in

political organization, economics, sociolinguistics, and literature. Three lecture hours a week for one semester.

# HIS 310K. Latin American Civilization: The Colonial Experience.

Same as Latin American Studies 310 (Topic 1: Latin American Civilization: The Colonial Experience). A broad survey of the political, economic, social, and cultural aspects of the Latin American past, stressing both that area's achievements and its enduring problems. Three lecture hours a week for one semester. Only one of the following may be counted: History 310K, 346K, Latin American Studies 310 (Topic 1), 366 (Topic 2: Latin America before 1810).

# HIS 310L. Latin American Civilization: The National Experience.

Same as Latin American Studies 310 (Topic 2: Latin American Civilization: The National Experience). A broad survey of the political, social, and cultural aspects of the Latin American past. Three lecture hours a week for one semester. Only one of the following may be counted: History 310L, 346L, Latin American Studies 310 (Topic 2), 366 (Topic 3: Latin America since 1810).

#### HIS 310M. Film and History in Latin America: Colonial Period.

Same as Latin American Studies 310 (Topic 5). Introduction to selected subjects in Latin American history and culture through film, readings, documentaries, class discussion, and lectures. Three lecture hours a week for one semester. Only one of the following may be counted: History 306N (Topic: Film History in Latin America: Colonial), 310M, Latin American Studies 310 (Topic: Film History in Latin America: Colonial), Latin American Studies 310 (Topic 5).

#### HIS 310N. Film and History in Latin America: Modern Period.

Same as Latin American Studies 310 (Topic 6). Introduction to selected subjects in Latin American history and culture through film, readings, documentaries, class discussion, and lectures. Three lecture hours a week for one semester. Only one of the following may be counted: History 306N (Topic: Film History in Latin America: Modern), 310N, Latin American Studies 310 (Topic: Film History in Latin America: Modern), 310 (Topic 6).

#### HIS 311K. Introduction to Traditional Africa.

Same as African and African Diaspora Studies 310L. Introductory, interdisciplinary course on the peoples and cultures of Africa. Three lecture hours a week for one semester.

# HIS 314K (TCCN: HIST 2328). History of Mexican Americans in the United States.

Same as Mexican American Studies 316. Examines the origin and growth of the Mexican American community in the United States. Three lecture hours a week for one semester. History 314K and Mexican American Studies 316 may not both be counted.

#### HIS 315G. Introduction to American Studies.

Same as American Studies 310. An interdisciplinary introduction to the historical exploration of American culture. Three lecture hours a week for one semester. American Studies 310 and History 315G may not both be counted.

#### HIS 315K (TCCN: HIST 1301). The United States, 1492-1865.

Survey of United States history from the colonial period through the Civil War. Three lecture hours or two lecture hours and one discussion hour a week for one semester.

#### HIS 315L (TCCN: HIST 1302). The United States since 1865.

Survey of United States history since the Civil War. Three lecture hours or two lecture hours and one discussion hour a week for one semester.

#### HIS 317L (TCCN: HIST 2381). Topics in United States History.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### Topic 1: Colonial America.

#### Topic 2: The Era of the American Revolution.

**Topic 3: Introduction to African American History.** Same as African and African Diaspora Studies 317D (Topic 1). Only one of the following may be counted: African and African Diaspora Studies 317 (Topic: Introduction to African American History), 317D (Topic 1), History 317L (Topic 3).

**Topic 4: Introduction to Asian American History.** Same as Asian American Studies 312. Introduces students to the national and transnational histories of Asian Americans in the United States. Explores a wide range of themes related to the Asian American experience. Asian American Studies 312 and History 317L (Topic 4) may not both be counted.

**Topic 5: United States Women, Sexuality, and Gender to 1865.** Same as Women's and Gender Studies 301 (Topic 11). History 317L (Topic 5) and Women's and Gender Studies 301 (Topic 11) may not both be counted.

**Topic 6: The United States in the 17th-Century Atlantic World.** The United States during a period marked by the spread of knowledge and experience of the world through conflict, economic exchange, cultural creativity, exploration, New World colonization, technological innovation, and religious reformation and counter-reformation.

**Topic 7: The United States and Africa.** Same as African and African Diaspora Studies 317C (Topic 1). History of political, economic, and cultural relations between the United States and Africa from the early origins of the slave trade to the present. Only one of the following may be counted: African and African Diaspora Studies 317 (Topic: United States and Africa), 317C (Topic 1), History 317L (Topic 7).

#### **Topic 8: Introduction to Native American Histories.**

**Topic 9: The Black Power Movement.** Same as African and African Diaspora Studies 317D (Topic 3). Examines the major organizations, key figures, and ideologies of the Black Power movement from the late 1960s and early 1970s. Only one of the following may be counted: African and African Diaspora Studies 317D (Topic: Black Power Movement), 317D (Topic 3), History 317L (Topic: Black Power Movement), 317L (Topic 9).

**Topic 10: Rights in Modern America.** History 317L (Topic: Rights in Modern America) and 317L (Topic 10) may not both be counted. **Topic 11: Latino Histories.** Same as Mexican American Studies 319 (Topic 3). Explore the cultures, politics, and policies that shape the many Latino histories in the United States. Only one of the following may be counted: History 317L (Topic: Latino Histories), 317L (Topic 11), Mexican American Studies 319 (Topic: Latino Histories), 319 (Topic 3).

Topic 12: Mexican American Women, 1910-Present. Same as Mexican American Studies 319 (Topic 4) and Women's and Gender Studies 301 (Topic 13). Examines the history of Mexican and Mexican American women in the United States from the twentieth century to the present. Only one of the following may be counted: History 317L (Topic: Mexican American Women, 1910-Present), 317L (Topic 12), Mexican American Studies 319 (Topic: Mexican American Women, 1910-Present), 319 (Topic 4), Women's and Gender Studies 301 (Topic: Mexican American Women, 1910-Present), 301 (Topic 13). Topic 13: Origins of American Revolution. Focuses on the rise and fall of the British-American Atlantic Empire in the third quarter of the eighteenth century. Three lecture hours a week for one semester. History 317L (Topic: Origins of American Revolution) and 317L (Topic 13) may not both be counted.

Topic 14: Building America: Engineering, Society, and Culture, 1868-1980. Examines building in American society from the late 1860s to 1980. Only one of the following may be counted: American Studies 315 (Topic: Building America), History 317L (Topic: Building America), 317L (Topic 14).

**Topic 15: Establishing America, 1565-1815.** Introduction to the foundations of American History. History 317L (Topic: Establishing America, 1565-1815) and 317L (Topic 15) may not both be counted. **Topic 16: History of Religion in the United States.** Same as American Studies 315 (Topic 5) and Religious Studies 316U (Topic 1). Explores instances of religious dominance and religious diversity in United States history. Moving from the pre-colonial period to the present, it examines the changing circumstances of several religious communities, including American Indians and Puritans, Protestant evangelicals, Mormons, Roman Catholics, Jews, Muslims, and Hindus. Only one of the following may be counted: American Studies 315 (Topic: History of Religion in the United States), 315 (Topic 5), History 317L (Topic: History of Religion in the United States), 317L (Topic 16), Religious Studies 316U (Topic: History of Religion in the United States), 316U (Topic 1).

**Topic 17: Reading United States History Between the Lines.** Explores how historians read between the lines and where they look for clues, looking at the many methods historians use to discover and make sense of their evidence.

#### HIS 317N. Topics in History.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

**Topic 1: The Roots of Religious Toleration**. Same as European Studies 306 (Topic 3), Jewish Studies 311 (Topic 5), and Religious Studies 306 (Topic 1). Examines how freedom of conscience and religion crystallized in western and central Europe, both as a pragmatic practice and as a matter of principle. Only one of the following may be counted: Core Texts and Ideas 310 (Topic: Roots of Religious Toleration), European Studies 306 (Topic: Roots of Religious Toleration), 306 (Topic 3), History 317N (Topic: Roots of Religious Toleration), 317N (Topic 1), Jewish Studies 311 (Topic: Roots of Religious Toleration), 311 (Topic 5), Religious Studies 306 (Topic: Roots of Religious Toleration), 306 (Topic 5), Religious Studies 306 (Topic: Roots of Religious Toleration), 306 (Topic 5), Religious Studies 306 (Topic: Roots of Religious Toleration), 306 (Topic 5), Religious Studies 306 (Topic: Roots of Religious Toleration), 306 (Topic 5), Religious Studies 306 (Topic: Roots of Religious Toleration), 306 (Topic 5), Religious Studies 306 (Topic: Roots of Religious Toleration), 306 (Topic 5), Religious Studies 306 (Topic: Roots of Religious Toleration), 306 (Topic 5), Religious Studies 306 (Topic: Roots of Religious Toleration), 306 (Topic 5), Religious Studies 306 (Topic: Roots of Religious Toleration), 306 (Topic 5), Religious Studies 306 (Topic: Roots of Religious Toleration), 306 (Topic 5), Religious Studies 306 (Topic: Roots of Religious Toleration), 306 (Topic 5), Religious Studies 306 (Topic: Roots of Religious Toleration), 306 (Topic 5), Religious Studies 306 (Topic: Roots of Religious Toleration), 306 (Topic 5), Religious Studies 306 (Topic: Roots of Religious Toleration), 306 (Topic 5), Religious Studies 306 (Topic: Roots of Religious Toleration), 306 (Topic 1).

**Topic 3: The Civilizations of Africa to 1800.** Same as African and African Diaspora Studies 317C (Topic 4). Introductory course exposes students to ancient Africa, its peoples, cultures, and landscapes. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 317C (Topic: Civilizations of Africa to 1800), 317C (Topic 4), History 317N (Topic: Civilizations of Africa to 1800), 317N (Topic 3).

**Topic 4: Discovery History.** Analyzes claims from popular books in the light of accurate historical sources. It will introduce students to the process of making discoveries in historical research. History 317N (Topic: Discovery History) and 317N (Topic 4) may not both be counted.

#### HIS 318Q. Supervised Research.

Individual instruction.

#### HIS 318W. Thinking Like a Historian.

To understand history as an academic discipline in terms of research methods, evidence, and analysis. Three lecture hours a week for one semester. Only one of the following may be counted: History 317N (Topic: Thinking Like a Historian), 317N (Topic 2), 318W. Prerequisite: Nine semester hours of coursework in history.

#### HIS 319D. The Ancient Mediterranean World.

Same as Ancient History and Classical Civilization 319 (Topic 1: The Ancient Mediterranean World) and Classical Civilization 319D. Survey of the ancient Mediterranean from ca. 3000 BC to AD 476. Focus on the development of ideas and institutions in the Greek and Roman worlds and on the active cultural exchange among the diverse civilizations of the broader region that shaped Greek and Roman history and cultural identity. Three lecture hours or two lecture hours and one discussion hour a week for one semester.

#### HIS 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in History.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of History. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### HIS 320L. Texas until 1845.

Same as Mexican American Studies 320L. A study of Texas from before the European discovery through the exploration and mission periods to status as a Mexican colony and an independent republic. Three lecture hours a week for one semester. Only one of the following may be counted: History 320L, Mexican American Studies 320L, 374 (Topic: Texas until 1845). Three semester hours of Texas history may be substituted for half of the legislative requirement for American history. Prerequisite: Upper-division standing.

#### HIS 320P. Texas, 1845-1914.

A study of Texas through early statehood, the Civil War and Reconstruction, and its expansion from a dependent state to a beginning industrial entity. Three lecture hours a week for one semester. Three semester hours of Texas history may be substituted for half of the legislative requirement for American history. Prerequisite: Upper-division standing.

#### HIS 320R. Texas, 1914 to the Present.

Same as Mexican American Studies 374 (Topic 16) and Urban Studies 353 (Topic 2). The steady dissociation of Texas from its Old South status to a transitional state and a power in national politics. Three semester hours of Texas history may be substituted for half of the legislative requirement for American history. Prerequisite: Upper-division standing.

#### HIS 321. The History of Rome: The Empire.

Same as Ancient History and Classical Civilization 325 (Topic 2). A survey of the Roman world from Augustus to Constantine the Great. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Ancient History and Classical Civilization 325 (Topic 2), Core Texts and Ideas 375 (Topic: History of Rome: The Empire), European Studies 346 (Topic: History of Rome: The Empire), History 321. Prerequisite: Upper-division standing.

#### HIS 321G. Rome and Jerusalem.

Same as Ancient History and Classical Civilization 325 (Topic 3), Jewish Studies 365 (Topic 7), Middle Eastern Studies 342 (Topic 21), and Religious Studies 365 (Topic 1). A study of daily life in Israel during the Roman period, focusing on Jerusalem, ancient Palestinian synagogues and churches, Jewish and Christian symbolism, agriculture, warfare, and burial practices. Three lecture hours a week for one semester. Only one of the following may be counted: Ancient History and Classical Civilization 325 (Topic 3), Classical Civilization 348 (Topic: Rome and Jerusalem), History 321G, Jewish Studies 365 (Topic 7), Middle Eastern Studies 342 (Topic 21), Religious Studies 365 (Topic 1), Urban Studies 353 (Topic: Rome and Jerusalem). Prerequisite: Upper-division standing.

#### HIS 321M. The History of Rome: The Republic.

Same as Ancient History and Classical Civilization 325 (Topic 1). A survey of Roman history from the founding of Rome to the death of Julius Caesar. The equivalent of three lecture hours a week for one semester. Ancient History and Classical Civilization 325 (Topic 1) and History 321M may not both be counted. Prerequisite: Upper-division standing.

#### HIS 322C. Cultural History of World Science to 1650.

Cultural history of science from ancient times to the seventeenth century. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

# HIS 322D. The Scientific Revolution of the Seventeenth Century.

The history of science and its place in society from the mid-sixteenth century to the time of Isaac Newton. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 322G. History of the Modern Life Sciences.

History of the life sciences from the eighteenth century to the present. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 322M. History of Modern Science.

The history of science and its place in society from the time of Newton to the present. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 322R. Biology, Behavior, and Injustice.

Same as Core Texts and Ideas 370 (Topic 2). Explores questions about human behavior related to biological factors as compared with personal experiences and societal standards. Three lecture hours a week for one semester. Only one of the following may be counted: Core Texts and Ideas 370 (Topic: Biology, Behavior, and Injustice), 370 (Topic 2), History 322R, 366N (Topic: Biology, Behavior, and Injustice), 366N (Topic 16). Prerequisite: Upper division standing.

#### HIS 322S. The History of Genetics and Eugenics.

The history of genetics and eugenic practices in the twentieth century. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 323L. Europe since 1919.

Same as European Studies 346 (Topic 24). Survey course emphasizing the impact of the two world wars on European social, political, and cultural life in the twentieth century. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic: Europe since 1919), 346 (Topic 24), History 323L. Prerequisite: Upper-division standing.

#### HIS 328M. Modern Brazil.

Same as Latin American Studies 366 (Topic 12: Modern Brazil). The social, economic, political, and cultural forces that have shaped modern Brazil. Three lecture hours a week for one semester. Prerequisite: Upperdivision standing.

#### HIS 329P. History of the Atomic Bomb.

The development, use, and influence of nuclear weapons from the 1930s to 1954. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in History.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of History. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### HIS 329U. Perspectives on Science and Mathematics.

An examination of five notable episodes in the history of science: Galileo's conflict with the Catholic Church, Isaac Newton's formulation of the laws of motion, Charles Darwin's proposal of the theory of evolution by natural selection, the development of the atomic bomb, and the discovery of the double helix structure of DNA. Three lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: History 329U, 366N (Topic: Perspectives on Science and Mathematics), Philosophy 329U. Prerequisite: Upper-division standing.

#### HIS 331C. History of the Ottoman Empire.

Same as Middle Eastern Studies 331C. A survey of Ottoman society and culture and of the empire's place on the world scene. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 331G. History of Iran to 1800.

Same as Middle Eastern Studies 343 (Topic 3). A survey of the social, economic, and religious components unique to Iran from the pre-Islamic empire of the Achaemenids through the development of Iran as a medieval and premodern Islamic state. History 331G and Middle Eastern Studies 343 (Topic 3) may not both be counted. Prerequisite: Upper-division standing.

#### HIS 331J. History of the Arab World.

A general survey of the origins and development of Arabic civilization. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 331L. Modern Iran.

Same as Middle Eastern Studies 343 (Topic 6). The development of modern Iran; special attention is given to the impact of the West, the constitutional movement, nationalism, the oil crisis, and the Islamic Revolution of 1979. History 331L and Middle Eastern Studies 343 (Topic 6) may not both be counted. Prerequisite: Upper-division standing.

#### HIS 331R. Re-forming the Arab East, 1914-Present.

Same as Middle Eastern Studies 343 (Topic 2). Introduction to the history of the Middle East in the twentieth century. Examines forces that transformed the area from a relatively peaceful region to a radicalized environment. Explores colonialism, nationalism, secular modernism, impact of Zionism, rise of political Islam, status of women, and the oil revolution. Only one of the following may be counted: History 331R, History 364G (Topic: Re-forming the Arab East), Middle Eastern Studies 343 (Topic 2). Prerequisite: Upper-division standing.

### HIS 332G. European Intellectual History from the Enlightenment to Nietzsche.

Explores significant intellectual developments in Europe throughout the nineteenth century. Themes include romanticism, positivism, socialism,

and nihilism. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 332J. Twentieth-Century European Intellectual History.

Explores significant intellectual developments in Europe in the twentieth century. Topics include psychoanalysis, sociology, existentialism, and poststructuralism. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 333L. United States Foreign Relations, 1776-1914.

The history of United States foreign policy and diplomacy from the founding of the United States to the outbreak of the First World War. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

### HIS 333M. United States Foreign Relations, 1914 to the Present.

The history of United States foreign policy and diplomacy from the First World War to the present. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

# HIS 334C. Music Cultures of the Middle East, Past and Present.

Same as Middle Eastern Studies 334C. A historical and ethnomusicological survey of the Arab, Turkish, and Persian music cultures. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 334E. Modern Egypt: A History.

Same as Islamic Studies 373 (Topic 5) and Middle Eastern Studies 343 (Topic 1). Critically examines the social, political, and intellectual dynamics that shaped the different forms of political community, economic organization, and public culture over the past century. Covers colonialism, liberalism, Arab socialism, authoritarian capitalism, and Islamic republicanism. Three lecture hours a week for one semester. Only one of the following may be counted: History 334E, History 364G (Topic: Modern Egypt: A History), Islamic Studies 372 (Topic: Modern Egypt: A History), 373 (Topic 5), Middle Eastern Studies 343 (Topic 1). Prerequisite: Upper-division standing.

#### HIS 334J. History of Britain from the Restoration to 1783.

Same as European Studies 346 (Topic 26). Surveys the political, social, economic, and intellectual history of England and Great Britain from the restoration of the Stuart monarchy in 1660 to the conclusion of the War for American Independence in 1783. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic: History of Britain from the Restoration to 1783), 346 (Topic 26), History 334J. Prerequisite: Upper-division standing.

### HIS 334L. The American Revolution and the Founding of the United States, 1763-1800.

The Revolutionary transformation of America between 1763 and 1800. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 337N. Germany in the Twentieth Century.

Same as Russian, East European, and Eurasian Studies 335 (Topic 11: Germany in the Twentieth Century). Survey of German political and military institutions, economic development, culture, and society. History 337N and Russian, East European, and Eurasian Studies 335 (Topic 11) may not both be counted. Prerequisite: Upper-division standing.

#### HIS 340L. Post-Mao China: Change and Transformation.

Same as Asian Studies 340L. Examines in a historical context the Chinese economy, society, politics, and culture during the reform era that began in the late 1970s. Explores the transformation of rural and urban economies and related social consequences; government systems, political ideologies, and popular values; and China's integration into the global system and its impact on China's role in world politics. Three lecture hours a week for one semester. Only one of the following may be counted: Asian Studies 340L, 361 (Topic: Post-Mao China: Change and Transformation), History 340L, 364G (Topic: Post-Mao China: Change and Transformation). Prerequisite: Upper-division standing.

#### HIS 340M. Modern China.

Same as Asian Studies 340M. History of China from the intrusion of the West circa 1500 to the Communist revolution. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 340P. European Expansion in Asia.

Same as Asian Studies 340P. European exploration, the commerce of the East India Companies, and the beginnings of empire in South and Southeast Asia from the fifteenth to the early nineteenth century. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 340R. European Empires in Asia.

Same as Asian Studies 340R. The British in India and Malaya, the Dutch in Indonesia, and the French in Indochina since 1800. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 340S. The Chinese in the United States.

Same as Asian American Studies 325 (Topic 3) and Asian Studies 340S. History of the Chinese in the United States from their first arrival in significant numbers during the California Gold Rush of the midnineteenth century to the present. Three lecture hours a week for one semester. Only one of the following may be counted: Asian American Studies 325 (Topic: Chinese in the United States), 325 (Topic 3), Asian Studies 340S, History 340S. Prerequisite: Upper-division standing.

#### HIS 340T. Taiwan: Colonization, Migration, and Identity.

Same as Asian American Studies 325 (Topic 4: Taiwan: Colonization, Migration, and Identity) and Asian Studies 340T. Explores issues of ethnicity, empire, and modernization in East Asia from the sixteenth century to the present, as seen through encounters between Taiwan and aborigines, Han Chinese, Dutch, Portuguese, the imperial Qing, Japanese, mainland Chinese Nationalist Party (KMT), and the United States. Three lecture hours a week for one semester. Only one of the following may be counted: Asian American Studies 325 (Topic 4), Asian Studies 340T, 361 (Topic: Taiwan: Colonization, Migration, and Identity), History 340T, 364G (Topic: Taiwan: Colonization, Migration, and Identity). Prerequisite: Upper-division standing.

#### HIS 341K. Origins of Modern Japan.

Same as Asian Studies 341K. Japan to the beginnings of the Industrial Revolution, with a focus on the culminating age of samurai rule, the Tokugawa period (1600-1867). Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 341M. Imperial Japan.

Same as Asian Studies 341M. Japan from the Meiji transformation through war, defeat, and occupation. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 342C. Postwar Japan.

Same as Asian Studies 341N. Japan since the war and occupation. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 342D. Political Economy of Japan.

Same as Asian Studies 342D. Historical development of the Japanese economy since early modern times. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 343. The Age of Reformation.

Same as Religious Studies 344. Examines late medieval religion, the rise of Protestant movements, and the Catholic response in their cultural, political, and social contexts. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 343G. Italian Renaissance, 1350-1550.

Same as European Studies 346 (Topic 27). Survey of political, socioeconomic, religious, and intellectual trends during the Italian Renaissance. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic: Italian Renaissance, 1350-1550), 346 (Topic 27), History 343G, 362K (Topic: Italian Renaissance, 1350-1550). Prerequisite: Upper-division standing.

#### HIS 343L. History of Russia to 1917.

Same as Russian, East European, and Eurasian Studies 335 (Topic 5: History of Russia to 1917). Survey of Russian history from seventeenthcentury Muscovy to the fall of the Romanovs in 1917. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 343M. History of Russia since 1917.

Same as Russian, East European, and Eurasian Studies 335 (Topic 6: History of Russia since 1917). A survey of Russian history from the revolution of 1917 to the collapse of the Soviet Union. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 343P. History of Witchcraft.

A study of witch beliefs and witchcraft prosecutions in western Europe and colonial America, mainly between 1100 and 1700. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 343W. Witches, Workers, and Wives.

Same as European Studies 346 (Topic 3: Witches, Workers, and Wives) and Women's and Gender Studies 345 (Topic 29: Witches, Workers, and Wives). Explores the role of families and concepts of gender as expressed in key economic, social, political, and cultural patterns in early modern Europe. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 344E. France in the Middle Ages.

Social, cultural, political, and economic history of France from the fall of the Roman Empire to the fifteenth century; emphasis on the development of feudalism and nationalism. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 344F. Anglo-Saxon England.

The political, social, cultural, and legal history of England from about 410 to 1154. Lectures and discussion of primary sources. Three lecture hours a week for one semester. History 344F and 362K (Topic: Anglo-Saxon England) may not both be counted. Prerequisite: Upper-division standing.

#### HIS 344G. Twelfth-Century Renaissance: 1050-1200.

An examination of social, cultural, and intellectual developments in eleventh- and twelfth-century Europe. Three lecture hours a week for one semester. History 344G and 362K (Topic: Twelfth-Century Renaissance: 1050-1200) may not both be counted. Prerequisite: Upper-division standing.

#### HIS 344J. Norman and Angevin England.

Political, social, and legal history of England from the Norman conquest in 1066 to the end of the reign of Richard III in 1485. Three lecture hours a week for one semester. History 344J and 362K (Topic: Norman and Angevin England) may not both be counted.

#### HIS 344M. Everyday Life in Early Modern Europe.

Social history of early modern Europe (1400-1700), with emphasis on material conditions of social existence. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 345J. The Coming of the Civil War, 1829-1861.

Lecture and discussion course dealing with the historical conditions that led to the American Civil War. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

# HIS 345L. The American Civil War and Reconstruction, 1861-1877.

Lecture and discussion course on the Civil War and Reconstruction period. Three lecture hours a week for one semester. Prerequisite: Upperdivision standing.

#### HIS 346C. Ancient India.

Same as Asian Studies 346C. History and culture of South Asia from its protohistoric beginnings in the Indus Valley through the period of the early empires of the Mauryas and Guptas. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 346D. Medieval India.

Same as Asian Studies 346D. History and culture of South Asia from approximately 500 to 1500, with emphasis on religious and political institutions and the emergence of regional cultures. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 346J. Colonial Latin America through Objects.

Same as Latin American Studies 366 (Topic 20). Examines objects, such as paintings, reliquaries, monstrances, and churches from colonial Latin America in order to understand colonial culture. Includes critical reading of original texts. Three lecture hours a week for one semester. Only one of the following may be counted: History 346J, 363K (Topic: Colonial Latin America through Objects), Latin American Studies 366 (Topic 20). Prerequisite: Upper-division standing.

#### HIS 346K. Colonial Latin America.

Same as Latin American Studies 366 (Topic 2: Colonial Latin America). Basic survey course, designed as an introduction to Latin American history in the colonial period. Three lecture hours a week for one semester. Only one of the following may be counted: History 310K, 346K, Latin American Studies 310 (Topic 1: Latin American Civilization: The Colonial Experience), 366 (Topic 2). Prerequisite: Upper-division standing.

#### HIS 346L. Modern Latin America.

Same as Latin American Studies 366 (Topic 3). Continuation of History 346K and Latin American Studies 366 (Topic 2). Only one of the following may be counted: African and African Diaspora Studies 374E (Topic: Modern Latin America), 374E (Topic 5), History 310L, 346L, Latin American Studies 310 (Topic 2: Latin American Civilization: The National Experience), 366 (Topic 3). Prerequisite: Upper-division standing.

#### HIS 346M. Early Modern India.

Same as Asian Studies 346M. The history and culture of South Asia from approximately 1500 to 1750. Three lecture hours a week for one semester. Only one of the following may be counted: Asian Studies

346M, History 346M, Religious Studies 341 (Topic 6). Prerequisite: Upperdivision standing.

#### HIS 346N. The Indian Subcontinent, 1750-1950.

Same as Asian Studies 346N. Examines the cultural and political movements and events that led to formation of the two nation-states India and Pakistan. Three lecture hours a week for one semester. Asian Studies 346N and History 346N may not both be counted. Prerequisite: Upper-division standing.

#### HIS 346P. The Indian Republic Since 1947.

An overview of Contemporary India, a republic that emerged from the British Empire. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 346R. Revolution in Modern Latin America.

Same as Latin American Studies 366 (Topic 13: Revolution in Modern Latin America). Comparison of the Mexican and Cuban revolutions and of their challenges to inter-American relations. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 346S. Revolution in Twentieth-Century Latin America.

Same as Latin American Studies 366 (Topic 9: Revolution in Twentieth-Century Latin America). An introduction to recent Latin American history, with emphasis on phenomena that explain the apparent social unrest and political instability of the region. Three lecture hours a week for one semester. Only one of the following may be counted: History 346L, 366N (Topic: Revolution in Twentieth-Century Latin America), Latin American Studies 366 (Topic 9). Prerequisite: Upper-division standing.

#### HIS 346T. The Cuban Revolution and the United States.

Same as Latin American Studies 366 (Topic 17: The Cuban Revolution and the United States). The special economic and political relationship between the United States and Cuba from 1898 to 1967; and how the 1959 revolution affected the Cold War relationships between East and West, North and South. Three lecture hours a week for one semester. Only one of the following may be counted: History 346T, 366N (Topic: The Cuban Revolution and the US), Latin American Studies 366 (Topic: The Cuban Revolution and the US), 366 (Topic 17). Prerequisite: Upperdivision standing.

#### HIS 346V. Twentieth-Century Rural Latin America.

Same as Latin American Studies 366 (Topic 19: Twentieth-Century Rural Latin America). Examines causes of some of the unresolved conflicts affecting Latin America today, including the social-agrarian relationships linking landlords and campesinos; the role of the state and the impact of official ideologies involving indigenous people; religion and the Catholic Church; the history of rural institutions; and the success or failure of land reforms. Three lecture hours a week for one semester. Only one of the following may be counted: History 346V, 363K (Topic: Twentieth-Century Rural Latin America), Latin American Studies 366 (Topic 19). Prerequisite: Upper-division standing.

#### HIS 346W. Church and State in Latin America.

Same as Latin American Studies 366 (Topic 21: Church and State in Latin America) and Religious Studies 368 (Topic 1: Church and State in Latin America). History of Church-state relations and religious politics in modern Latin America, with emphasis on the nineteenth to early twentieth-century periods. Three lecture hours a week for one semester. Only one of the following may be counted: History 346W, 363K (Topic: Church and State in Latin America), Latin American Studies 366 (Topic 21), Religious Studies 368 (Topic 1). Prerequisite: Upper-division standing.

#### HIS 347C. Reimagining Cuba, 1868-Present.

Same as African and African Diaspora Studies 374E (Topic 4) and Latin American Studies 366 (Topic 22). Explores Cuban-United States relations from the nineteenth century to the present, including issues of empire and transnationalism, and social change engagements between Cuba and the United States before and after the Cuban Revolution. Only one of the following may be counted: African and African Diaspora Studies 374E (Topic: Reimagining Cuba, 1868-Present), 374E (Topic 4), History 347C, 363K (Topic: Reimagining Cuba, 1868-Present), Latin American Studies 366 (Topic 22). Prerequisite: Upper-division standing.

#### HIS 347L. Seminar in Historiography.

Restricted to students in the History Honors Program. Designed to familiarize students in the honors program with general problems of historiography, historical interpretation, and the philosophy of history. Three lecture hours a week for one semester. Prerequisite: Consent of instructor.

#### HIS 349R. Military History to 1640.

A broad survey of world military systems from ancient times to about 1640. Three lecture hours a week for one semester. Prerequisite: Upperdivision standing.

#### HIS 349S. Survey of Military History, 1640 to 1900.

An investigation of world military systems and of the evolution of military technology from about the time of the Thirty Years' War to the end of the nineteenth century. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 350L. Undergraduate Seminar in History.

Lectures, discussion, reading, and research on selected topics in the field of history. Three lecture hours a week for one semester. History 350L and 350R may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 5: Gandhi and Gandhism.** Same as Asian Studies 361 (Topic 6: Gandhi and Gandhism) and Religious Studies 341 (Topic 5: Gandhi and Gandhism).

Topic 19: Resistance, Rebellion, and Revolution in Colonial Spanish America. Same as Latin American Studies 366 (Topic 7: Resistance, Rebellion, and Revolution in Colonial Spanish America). Only one of the following may be counted: History 350L (Topic 19), Latin American Studies 366 (Topic: Resistance, Rebellion, and Revolution in Colonial Spanish America), 366 (Topic 7).

#### Topic 32: The Galileo Affair.

**Topic 33: Heresy and the Inquisition.** Same as Religious Studies 357 (Topic 1: Heresy and the Inquisition).

Topic 34: Medieval Islam: Faith and History. Same as Middle Eastern Studies 343 (Topic 5) and Religious Studies 358 (Topic 2). Only one of the following may be counted: History 350L (Topic 34), Middle Eastern Studies 343 (Topic 5), Religious Studies 358 (Topic 2). Additional prerequisite: Upper-division standing.

**Topic 35: Nigeria: A History of Nation-Building.** Same as African and African Diaspora Studies 372G (Topic 2). African and African Diaspora Studies 372G (Topic 2) and History 350L (Topic 35) may not both be counted.

**Topic 41: Stalinist Russia.** Same as Russian, East European, and Eurasian Studies 335 (Topic 12). History 350L (Topic 41) and Russian, East European, and Eurasian Studies 335 (Topic 12) may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 42: History of Modern Central America**. Same as Latin American Studies 366 (Topic 15: History of Modern Central America). Only one of the following may be counted: History 350L (Topic 42), 363K (Topic: History of Modern Central America), Latin American Studies 366 (Topic 15). **Topic 44: Culture and Identity in Colonial Mexico.** Same as Latin American Studies 366 (Topic 16: Culture and Identity in Colonial Mexico).

**Topic 46: Women and Gender in China.** Same as Asian Studies 372 (Topic 21: Women and Gender in China) and Women's and Gender Studies 340 (Topic 18: Women and Gender in China).

#### Topic 49: History of Imperialism.

Topic 50: Imperialism: Empire to Globalization.

Topic 54: Epics and Heroes of India. Same as Ancient History and Classical Civilization 330 (Topic 2), Asian Studies 372 (Topic 40), and Core Texts and Ideas 345 (Topic 11). Only one of the following may be counted: Ancient History and Classical Civilization 330 (Topic: Epics and Heroes of India), 330 (Topic 2), Asian Studies 372 (Topic: Epics and Heroes of India), 372 (Topic 40), Core Texts and Ideas 345 (Topic: Epics and Heroes of India), 345 (Topic 11), History 350L (Topic 54). Topic 56: Germany since Hitler.

**Topic 57: Law and Society in Early Modern Europe.** Same as European Studies 346 (Topic 4: Law and Society in Early Modern Europe) and Women's and Gender Studies 340 (Topic 13: Law and Society in Early Modern Europe). Research seminar on how historians have explored the significance of law, criminal and civil, in the lives of early modern Europeans. Topics include infanticide, fornication, drunkenness, theft, debt, slander, and family disputes. Only one of the following may be counted: European Studies 346 (Topic 4), History 350L (Topic 57), Women's and Gender Studies 340 (Topic 13).

**Topic 59: Stalin's Russia at War.** Only one of the following may be counted: History 350L (Topic 59), 362G (Topic: Stalin's Russia at War), 366N (Topic: Stalin's Russia at War).

**Topic 62: History of the Caribbean.** Same as Latin American Studies 366 (Topic 18: History of the Caribbean). Overview of Caribbean history from 1492 to the present. Topics include contact between European and native cultures, piracy, slavery, colonialism and decolonization, and revolutions.

**Topic 63: Electrification.** An examination of how electrical technologies have changed the workings of the world and the lives of ordinary people over the past 175 years. History 350L (Topic: Electrification) and 350L (Topic 63) may not both be counted. **Topic 64: Einstein in the Age of Conflict.** Same as Core Texts and Ideas 371. Following the life and work of Albert Einstein, course examines the rise of the theories of relativity and quantum mechanics upon the stage of international political upheaval. Only one of the following may be counted: Core Texts and Ideas 370 (Topic: Einstein in the Age of Conflicts), History 350L (Topic: Einstein in the Age of Conflicts), 350L (Topic: 64).

Topic 65: The Chinese in Diaspora. Same as Asian American Studies 325 (Topic 2) and Asian Studies 361 (Topic 28). Explores narratives of migration, race, ethnicity, and a wide range of experiences of acculturation and assimilation from the perspective of a sending society--China--which has one of the longest and most diverse histories of sending people overseas. Over the last millennia, Chinese have migrated around the world and made homes under a great range of adversity and opportunity, producing many stories of human differences and commonalities. For 361, three lecture hours a week for one semester; for 461, four lecture hours a week for one semester. Only one of the following may be counted: Asian American Studies 325 (Topic: Chinese in Diaspora), 325 (Topic 2: The Chinese in Diaspora), Asian Studies 361 (Topic: Chinese in Diaspora), 361, 461 (Topic 28), History 350L (Topic: The Chinese in Diaspora), 350L (Topic 65: The Chinese Diaspora). Additional prerequisite: Upper-division standing.

**Topic 66: Dictatorship, Dirty War, and Democracy in Latin America.** Same as Latin American Studies 366 (Topic 23). Only one of the following may be counted: History 350L (Topic: Dictator/Dirty War in Latin America), 350L (Topic 66), Latin American Studies 366 (Topic: Dictator/Dirty War in Latin America), 366 (Topic 23). **Topic 67: Mughal India in History and Memory.** Same as Asian Studies 361 (Topic 33) and Islamic Studies 372 (Topic 20). Focuses on South Asia during the era of the Mughal empire (1550-1750), continuing through the symbolic relevance of the Mughal dynasty in British India and in India today. Only one of the following may be counted: Asian Studies 361 (Topic: Mughal India in History and Memory), 361 (Topic 33), History 350L (Topic: Mughal India in History and Memory), 350L (Topic 67), Islamic Studies 372 (Topic: Mughal India in History and Memory), 372 (Topic 20).

**Topic 68: Afro-Latin America.** Same as African and African Diaspora Studies 372G (Topic 10) and Latin American Studies 366 (Topic 31). Examines the historical experiences of people of African descent in Latin America and the Caribbean beginning in the slavery era, and focuses on the histories of Afro-Latin Americans after emancipation. Only one of the following may be counted: African and African Diaspora Studies 372G (Topic: Afro-Latin America), 372G (Topic 10), 374E (Topic: Afro-Latin America), History 350L (Topic: Afro-Latin America), 350L (Topic 68), Latin American Studies 366 (Topic: Afro-Latin America), 366 (Topic 31). Additional prerequisite: Upper-division standing.

**Topic 69: The Decolonization of the British Empire.** Explores the era of decolonization of the British empire after World War II. Only one of the following may be counted: History 350L (Topic: Decolonization of British Empire), 350L (Topic 69), Liberal Arts Honors 350 (Topic: Decolonization of British Empire), 350 (Topic 8).

**Topic 70: Historical Imagining of Africa in Films.** Same as African and African Diaspora Studies 374F (Topic 18) and Women's and Gender Studies 340 (Topic 40). Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Historical Imagining of Africa in Film), 374F (Topic 18), History 350L (Topic: Historical Imagining of Africa in Film), 350L (Topic 70), Women's and Gender Studies 340 (Topic: Historical Imagining of Africa in Film), 340 (Topic 40).

**Topic 71: Liberalism and the British Empire.** Explores the emergence of the political and economic ideas of liberalism in Britain and the evolution of British overseas expansion during the seventeenth-, eighteenth-, and early nineteenth- centuries. History 350L (Topic: Liberalism and the British Empire) and 350L (Topic 71) may not both be counted.

**Topic 72: History of Southern Africa.** Same as African and African Diaspora Studies 374C (Topic 4) and Women's and Gender Studies 340 (Topic 39). Only one of the following may be counted: African and African Diaspora Studies 374C (Topic: History of Southern Africa), 374C (Topic 4), History 350L (Topic: History of Southern Africa), 350L (Topic 72), Women's and Gender Studies 340 (Topic: History of Southern Africa), 340 (Topic 39).

**Topic 74: Mystics, Visionaries, and Heretics in Medieval Europe.** Same as Ancient History and Classical Civilization 330 (Topic 3) and Religious Studies 375S (Topic 3). Examines particular mystical and visionary experiences within the context of medieval European Christianity. Only one of the following may be counted: Ancient History and Classical Civilization 330 (Topic: Mystics, Visionaries and Heretics in Medieval Europe), 330 (Topic 3), History 350L (Topic: Mystics, Visionaries and Heretics in Medieval Europe), 375S (Topic: Mystics, Visionaries and Heretics in Medieval Europe), 375S (Topic 3).

**Topic 75: Rethinking the Conquest of Mexico.** Same as Latin American Studies 366 (Topic 24). Explores the "conquest" of Mexico and the social, cultural, political, and economic processes which were set in motion by the Spanish invasion of Mexico. Only one of the following may be counted: History 350L (Topic: Rethinking Conquest of Mexico), 350L (Topic 75), Latin American Studies 366 (Topic: Rethinking Conquest of Mexico), 366 (Topic 24), Tutorial Course 357 (Topic: Rethinking Conquest of Mexico). Topic 76: The Religious Tradition in Latin America. Same as Latin American Studies 366 (Topic 25) and Religious Studies 368 (Topic 3). Explores the different ways in which religion has helped to define the political, social, and philosophical structures of Latin America from colonial times to the present. Only one of the following may be counted: History 350L (Topic: The Religious Tradition in Latin America), 350L (Topic 76), Latin American Studies 366 (Topic: The Religious Tradition in Latin America), 366 (Topic 25), Religious Studies 368 (Topic: The Religious Tradition in Latin America), 368 (Topic 3). Topic 77: The Spanish Inguisition. Same as European Studies 346 (Topic 11), Jewish Studies 364 (Topic 5), and Religious Studies 357 (Topic 10). Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic: The Spanish Inquisition), 346 (Topic 11), History 350L (Topic: The Spanish Inquisition), 350L (Topic 77), Jewish Studies 364 (Topic: The Spanish Inquisition), 364 (Topic 5), Religious Studies 357 (Topic: The Spanish Inquisition), 357 (Topic 10).

**Topic 78: Visual and Material Culture in Colonial Latin America.** Same as Latin American Studies 366 (Topic 26). Focuses on the visual and material culture of colonial Spanish America. Only one of the following may be counted: History 350L (Topic: Visual and Material Culture in Colonial Latin America), 350L (Topic 78), Latin American Studies 366 (Topic: Visual and Material Culture in Colonial Latin America), 366 (Topic 26).

**Topic 79: World War II in Eastern Europe.** Same as European Studies 346 (Topic 12), Jewish Studies 364 (Topic 11), and Russian, East European, and Eurasian Studies 335 (Topic 19). Examines the war in Eastern Europe with a particular emphasis on occupation, collaboration, and resistance; the Holocaust; and the connection between ethnic cleansing, population transfer, and the establishment of communism in postwar Eastern Europe. Only one of the following may be counted: European Studies 346 (Topic: World War II in Eastern Europe), 346 (Topic 12), History 350L (Topic: World War II in Eastern Europe), History 350L (Topic 79), Jewish Studies 364 (Topic: World War II in Eastern Europe), and Eurasian Studies 335 (Topic: World War II in Eastern Europe), 335 (Topic: 19).

**Topic 80: Creation.** Same as European Studies 346 (Topic 13) and Religious Studies 373 (Topic 5). Explores the writings of premodern authors as related to creation and early developments in western theology, science, and philosophy. Only one of the following may be counted: European Studies 346 (Topic: Creation), 346 (Topic 13), History 350L (Topic: Creation), 350L (Topic 80), Religious Studies 373 (Topic: Creation), 373 (Topic 5), Women's and Gender Studies 345 (Topic: Creation).

**Topic 81: Enlightenment and Revolution.** Same as Core Texts and Ideas 375 (Topic 3) and European Studies 346 (Topic 14). Examines the relationship between the intellectual project of the Enlightenment and the political and social transformations that unfolded in western Europe and North America from the beginnings of the Dutch Revolt in the 1560s to the decade following the Paris Commune of 1871. Only one of the following may be counted: Core Texts and Ideas 375 (Topic: Enlightenment and Revolution), 375 (Topic 3), European Studies 346 (Topic: Enlightenment and Revolution), 350L (Topic 14), History 350L (Topic: Enlightenment and Revolution), 350L (Topic 81). Additional prerequisite: Upper-division standing.

**Topic 82: Indian Ocean Travel and Trade, 1000-1700.** Examines long-distance travel and trade in the Indian Ocean region from approximately 1000 to 1700 AD. Only one of the following may be counted: Asian Studies 361 (Topic: Indian Ocean Travel and Trade, 1000-1700), History 350L (Topic: Indian Ocean Travel and Trade, 1000-1700), 350L (Topic 82).

**Topic 83: Writing Violence in History.** Examines how historians have approached episodes of violence and will also look outside of the discipline of history to see how psychoanalysts, anthropologists,

novelists, and activists have both understood violence and how they represent it in their work. History 350L (Topic: Writing Violence in History) and 350L (Topic 83) may not both be counted. **Topic 85: The Cold War in Five Continents.** Examination of the Cold War and the ensuing conflicts around the world (1945-1990). History 350L (Topic: The Cold War in Five Continents) and 350L (Topic 85) may not both be counted.

**Topic 86: Latin America in the Nineteenth Century.** Same as Latin American Studies 366 (Topic 32). Questions the geographical category of Latin America by examining the kinds of trends and forces of the nineteenth century that contributed to its conceptual emergence and to its growing political, economic, and cultural significance on the global stage. Only one of the following may be counted: History 350L (Topic: Latin America in the Nineteenth Century), 350L (Topic 86), Latin American Studies 366 (Topic: Latin America in the Nineteenth Century), 366 (Topic 32).

**Topic 89: Poland and the Second World War.** Examines the occupation of Poland by Germany and the Soviet Union and the ways in which this dual occupation impacted people and their communities. History 350L (Topic: Poland and the Second World War) and 350L (Topic 89) may not both be counted.

**Topic 90: Research on the Global Cold War.** Engage in original research in international relations during the turbulent era of the Cold War. Focus on one country in Latin America, Africa, Europe, the Middle East, or Asia in order to study the relationship between it and the United States during the administration of President Lyndon Baines Johnson. History 350L (Topic: Research on the Global Cold War) and 350L (Topic 90) may not both be counted.

**Topic 92: Uprising in India-1857.** Same as Asian Studies 361 (Topic 41). Introduces the problems faced with the uprising of 1857 in India, the most violent and widespread attempt ever made to destroy the British empire in South Asia. Only one of the following may be counted: Asian Studies 361 (Topic: Uprising in India-1857), 361 (Topic 41), History 350L (Topic: Uprising in India-1857), 350L (Topic 92). **Topic 94: Women and Wealth in South Asia.** Same as Asian Studies 372 (Topic 47) and Women's and Gender Studies 340 (Topic 68). Addresses the questions surrounding poverty of South Asian women by combining legal, political and social histories of the subcontinent over four centuries. Only one of the following may be counted: Asian Studies 372 (Topic: Women and Wealth in South Asia), 372 (Topic 47), History 350L (Topic: Women and Wealth in South Asia), 350L (Topic 94), Women's and Gender Studies 340 (Topic: 94), Women's and Gender Studies 340 (Topic: Asian Studies 340 (Topic: Women and Wealth in South Asia), 350L (Topic 94), Women's and Gender Studies 340 (Topic: Women and Wealth in South Asia), 340 (Topic 68).

#### HIS 350R. Undergraduate Seminar in United States History.

Lectures, discussion, reading, and research on selected topics in the field of United States history. Three lecture hours a week for one semester. History 350L and 350R may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Upperdivision standing and six semester hours of coursework in history.

- Topic 1: Coastal Communities in Early America.
- Topic 2: Lyndon Johnson and His Times.

Topic 3: Myth and Construction of American Identity.

Topic 4: Constitutional Issues in the Twentieth-Century United States. Topic 5: American Cultural History of Alcohol and Drugs. Same as American Studies 370 (Topic 1). Study of the American use and perception of drugs, including alcohol, and how they have changed over time. Examines significant shifts in American attitudes toward individualism and social control. American Studies 370 (Topic 1) and History 350R (Topic 5) may not both be counted.

**Topic 6: Deviance in America: An Alternative History.** Same as American Studies 370 (Topic 22). Examines movements and individuals outside the conventional mainstream and how they reflect American ideals and dilemmas. American Studies 370 (Topic 22) and History 350R (Topic 6) may not both be counted.

**Topic 7: Environmental History of North America.** Same as American Studies 329 and Urban Studies 353 (Topic 5). The history of humanity's influence on the plants, animals, microlife, soils, water, and air of North America, and vice versa, from the arrival of the proto-Indians to the contemporary environmental crisis. Only one of the following may be counted: American Studies 329, History 350R (Topic 7), Urban Studies 353 (Topic 5).

**Topic 8: Women in Postwar America.** Same as American Studies 370 (Topic 30) and Women's and Gender Studies 345 (Topic 37). Only one of the following may be counted: American Studies 370 (Topic 30), History 350R (Topic 8), Women's and Gender Studies 345 (Topic 37). **Topic 9: Animals and American Culture.** Same as American Studies 370 (Topic 28) and Women's and Gender Studies 345 (Topic 43). Explores the role of animals in American history, culture, and society. Only one of the following may be counted: American Studies 370 (Topic 28), History 350R (Topic 9), Women's and Gender Studies 345 (Topic 43).

**Topic 10: Slavery in the United States.** Same as African and African Diaspora Studies 374D (Topic 3). African and African Diaspora Studies 374D (Topic 3) and History 350R (Topic 10) may not both be counted. **Topic 11: Race and Beauty in American Culture.** Same as African and African Diaspora Studies 372C (Topic 2). African and African Diaspora Studies 372C (Topic 2) and History 350R (Topic 11) may not both be counted.

**Topic 12: History of Black Entrepreneurship in the United States.** Same as African and African Diaspora Studies 374D (Topic 2). African and African Diaspora Studies 374D (Topic 2) and History 350R (Topic 12) may not both be counted.

Topic 13: History of Sexuality in America. Same as Women's and Gender Studies 345 (Topic 38). History 350R (Topic 13) and Women's and Gender Studies 345 (Topic 38) may not both be counted. Additional prerequisite: Six semester hours of coursework in history. Topic 14: Gender and Slavery in the United States. Same as African and African Diaspora Studies 372C (Topic 4) and Women's and Gender Studies 345 (Topic 31). Examines the gendered experience of chattel slavery in the United States. Includes critical analysis of classic and contemporary texts, films, and songs that focus on slave labor, family, community, sexuality, and the economy. Only one of the following may be counted: African and African Diaspora Studies 372C (Topic 4), 374D (Topic: Gender and Slavery in the United States), History 350L (Topic: Gender and Slavery in the United States), 350R (Topic 14), Women's and Gender Studies 340 (Topic: Gender and Slavery in the United States), 345 (Topic 31).

**Topic 16: Innovation in the United States Economy.** Examines creativity in the United States' economy, primarily since 1865. Includes major innovations associated with the evolution of the economy, such as the development of branding and the coming of the computer industry.

**Topic 17: Black Women in America.** Same as African and African Diaspora Studies 374D (Topic 9) and Women's and Gender Studies 340 (Topic 9). Uses primary sources, historical monographs, and essays to provide a chronological and thematic overview of the experiences of black women in America from their African roots to the circumstances they face in the present era. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: Black Women in America), 374D (Topic 9), History 350L (Topic: Black Women in America), 350R (Topic 17), Women's and Gender Studies 340 (Topic: Black Women in America), 340 (Topic 9).

**Topic 18: Women in Sickness and Health.** Same as Women's and Gender Studies 345 (Topic 3). Explores medical and biological views throughout the nineteenth and twentieth centuries of women and women's health, the social context of those views, the development of medical practices, and the treatment of illness and debility. Only

one of the following may be counted: History 350L (Topic: Women in Sickness and Health), 350R (Topic 18), Women's and Gender Studies 345 (Topic 3). Additional prerequisite: Six semester hours of coursework in history.

**Topic 19: American Popular Culture, 1682-Present.** Same as American Studies 370 (Topic 35) and Women's and Gender Studies 340 (Topic 26). Explores the evolution of American popular culture and its relationship to national consolidation, and at times, disunion, over the last 330 years.

**Topic 20: History of American Feminism.** Same as Women's and Gender Studies 345 (Topic 49). Only one of the following may be counted: History 350R (Topic: History of American Feminism), 350R (Topic 20), Women's and Gender Studies 345 (Topic: History of American Feminism), 345 (Topic 49).

**Topic 21: Pluralism in Early America.** Only one of the following may be counted: History 350L (Topic: Pluralism in Early America), 350R (Topic: Pluralism in Early America), 350R (Topic 21).

**Topic 22: The History of Islam in the United States.** Same as Islamic Studies 372 (Topic 21) and Religious Studies 346 (Topic 10). A brief introduction to Islam. Defines the role of Islam and views of Muslims in the early history of the United States, and introduces students to major issues concerning contemporary American Muslims. Only one of the following may be counted: History 350R (Topic: History of Islam in the United States), 350R (Topic 22), Islamic Studies 372 (Topic: History of Islam in the United States), 372 (Topic 21), Religious Studies 346 (Topic: History of Islam in the United States), 346 (Topic 10).

**Topic 23: Twentieth-Century Native American History.** Studies Native American life and culture from the late nineteenth- to the twentieth-century through the use of historical and anthropological texts, autobiographies, documentaries, and fiction. Three lecture hours a week for one semester. Only one of the following may be counted: History 350L (Topic: Twentieth-Century Native American History), 350R (Topic: Twentieth-Century Native American History), 350R (Topic: 23).

**Topic 24: Domestic Slave Trade.** Same as African and African Diaspora Studies 374D (Topic 20). Explores the inner workings of the domestic slave trade from the perspectives of slaveholders, speculators, and the enslaved. Analysis of maps, letters, diaries, newspaper advertisements, and legislation relating to the domestic slave trade. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: Domestic Slave Trade), 374D (Topic 20), History 350R (Topic: Domestic Slave Trade), 350R (Topic 24).

Topic 25: Race and Citizenship in United States History. Same as American Studies 370 (Topic 48) and Mexican American Studies 374 (Topic 35). Uses primary and secondary sources to analyze how race and citizenship have functioned for populations of color in the United States. Only one of the following may be counted: American Studies 370 (Topic: Race and Citizenship in United States History), 370 (Topic 48), History 350R (Topic: Race and Citizenship in United States History), 350R (Topic 25), Mexican American Studies 374 (Topic: Race and Citizenship in United States History), 374 (Topic 35). Topic 26: United States Media, Culture, and Commerce. Examines the history of the United States media as both a successful corporate product and as an important tool for the formation of personal and community identity. Only one of the following may be counted: History 350L (Topic: United States Media, Culture, and Commerce), 350R (Topic: United States Media, Culture, and Commerce), 350R (Topic 26). Topic 27: Arts and Artifacts in the Americas. Surveys the changing material culture of the western hemisphere from pre-Columbian times to the beginning of the industrial revolution. History 350R (Topic: Arts and Artifacts in the Americas) and 350R (Topic 27) may not both be counted.

**Topic 28: Debating the American Revolution.** Examination of the precipitant events and ideas leading up to the American Declaration of Independence through discussions, lectures, and an extended exercise in historical role playing. History 350R (Topic: Debating the American Revolution) and 350R (Topic 28) may not both be counted. **Topic 29: Globalization, Transnationalism, and Internationalism.** Same as African and African Diaspora Studies 374C (Topic 3). Addresses the complex role of the United States in the greater scope of international relations in politics, with an emphasis on how political events in the United States reach the African continent in a variety of ways. Only one of the following may be counted: African and African Diaspora Studies 374C (Topic: Globalization, Internationalism), 374C (Topic 3), History 350R (Topic: Globalization, Internationalism, and Transnationalism), 350R (Topic 29). Prerequisite: Upper-division standing.

**Topic 30: History of Teaching American History.** Examination and evaluation of the role of the historian and teacher of history today and the changing ideas of how American history has been taught. Only one of the following may be counted: History 350L (Topic: History of Teaching American History), 350R (Topic: History of Teaching American History), 350R (Topic 30).

**Topic 31: Irrationality in United States Economic History.** Explores new research from psychology, economics, history, and law that finds human beings have acted irrationally in numerous situations. Students will sample historical research from subjects such as marketing, discrimination, labor policies, and public policy. History 350R (Topic: Irrationality in United States Economic History) and 350R (Topic 31) may not both be counted.

**Topic 32: America at War.** Investigation of major American wars from the Revolutionary War to the wars in Iraq and Afghanistan. Only one of the following may be counted: History 350L (Topic: America at War), 350R (Topic: America at War), 350R (Topic 32).

**Topic 33: Consuming America.** Explores the history of the relationship between the American consumer and the nation's social history. Only one of the following may be counted: History 350L (Topic: Consuming America), 350R (Topic: Consuming America), 350R (Topic 33).

**Topic 35: The Civil Rights Movement from a Comparative Perspective.** Same as African and African Diaspora Studies 374D (Topic 18). Focuses on African American and Mexican American struggles for civil rights. Asian American and Native American movements will also be addressed. Using a comparative approach the student will consider the distinctiveness of each of these struggles while also viewing them in relation to each other. Only one of the following may be counted: American Studies 370 (Topic: Civil Rts Mov from Comp Persp), African and African Diaspora Studies 374D (Topic: Civil Rts Mov from Comp Persp), 374D (Topic 18), History 350R (Topic: Civil Rts Mov from Comp Persp), 350R (Topic 35).

**Topic 36: Mexican Americans in Texas History.** Introduction to the historical experience of Mexican-American persons in Texas. Three lecture hours a week for one semester. Only one of the following may be counted: History 350R (Topic: Mexican Americans in Texas History), 350R (Topic 36), Mexican American Studies 374 (Topic: Mexican Americans in Texas History). Additional prerequisite: Upper-division standing.

**Topic 37: Refugees in Twentieth-Century United States.** Same as Asian American Studies 325 (Topic 10). Explores the history of refugees in the twentieth century, with special attention to the United States and its engagement in the international arena of refugee politics. Only one of the following may be counted: Asian American Studies 325 (Topic: Refugees in 20th-Century US), 325 (Topic 10), History 350R (Topic: Refugees in 20th-Century US), 350R (Topic 37). Additional prerequisite: Upper-division standing and six semester hours of coursework in history.

**Topic 39: Alexander Hamilton and Thomas Jefferson in Context.** Examination of the public and private lives of Thomas Jefferson and Alexander Hamilton, their roles in the American Revolution, and the rivalry during Washington's presidency, until Jefferson's election as the third President and Hamilton's death in a duel in 1804. Only one of the following may be counted: History 350R (Topic: Thomas Jefferson and His World), 350R (Topic 15), 350R (Topic 39).

#### HIS 351D. Alexander the Great and the Hellenistic World.

Same as Ancient History and Classical Civilization 325 (Topic 6). History of Asia, Egypt, and the Mediterranean world from Alexander's expedition to Asia to Rome's defeat of the last of the Hellenistic monarchs at Actium (ca. 334 to 31 BC). Two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Ancient History and Classical Civilization 325 (Topic 5), 325 (Topic 6), Classical Civilizations 351D, 354D, History 351D, 354D. Prerequisite: Upper-division standing.

#### HIS 351P. History of Religion in America since 1800.

Same as Religious Studies 326. Introduction to the history of religion in the United States of America from the nineteenth century to the present. Focuses on how diverse peoples imagined and transformed the landscape, interacted with one another at different sites, and moved within and across national borders. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 352L. The Mexican Revolution, 1910-1920.

Same as Latin American Studies 366 (Topic 8: The Mexican Revolution, 1910-1920). An analytical examination of the initial decade of the Mexican Revolution, the first of the twentieth-century nationalist social revolutions; examines through lectures and discussion the historical antecedents and the political, economic, social, and intellectual elements of the upheaval. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 352P. England in the Twentieth Century.

A survey of political, economic, social, and intellectual trends, with emphasis on class relationships. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic: England in the Twentieth Century), History 352P, 362G (Topic: England in the Twentieth Century). Prerequisite: Upper-division standing.

#### HIS 353. The French Revolution and Napoleon.

Same as European Studies 346 (Topic 25). Analysis of the social, political, and economic origins and outcomes of the French Revolution and Napoleon's empire. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic: The French Revolution and Napoleon), 346 (Topic 25), History 353. Prerequisite: Upper-division standing.

#### HIS 354E. Archaic and Classical Greece.

Same as Ancient History and Classical Civilization 325 (Topic 7) and Core Texts and Ideas 375 (Topic 7). Survey of Greek history from the emergence of the city-states to the rise of Macedonia. Two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Ancient History and Classical Civilization 325 (Topic 4), 325 (Topic 7), Classical Civilizations 354C, Core Texts and Ideas 375 (Topic: Archaic and Classical Greece), 375 (Topic 7), History 354C, 354E. Prerequisite: Upper-division standing.

#### HIS 354N. France in Modern Times.

The impact of revolution on French political, economic, and social development in the nineteenth and twentieth centuries. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 355F. The United States, 1877-1920.

Examines the Gilded Age and Progressive Era to depict the rise of modern America. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 355M. The United States, 1920-1941.

Same as American Studies 358. A history of political, economic, diplomatic, military, social, and cultural developments in the United States between the two world wars. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 355N. Main Currents of American Culture to 1865.

Same as American Studies 355. Traces the development of American culture and society from the colonial era until the end of the Civil War. Major themes include racial conflict, religion, slavery, the development of democracy, and cultural reform. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 355P. The United States since 1941.

A history of political, economic, diplomatic, social, and cultural developments in the United States since the nation's entry into World War II. Three lecture hours a week for one semester. Prerequisite: Upperdivision standing.

#### HIS 355S. United States Constitutional History.

A lecture and discussion course dealing with the history of the development of the American constitutional tradition from colonial times to the present. Three lecture hours a week for one semester. History 355S and 366N (Topic: United States Constitutional History) may not both be counted. Prerequisite: Upper-division standing.

#### HIS 356G. History of the United States West.

Examines the history of the trans-Mississippi West with a special focus on the concepts of conquest, resistance, and region from the nineteenth to the twentieth century. Three lecture hours a week for one semester. History 356G and 365G (Topic: History of the United States West) may not both be counted. Prerequisite: Upper-division standing.

#### HIS 356K. Main Currents of American Culture since 1865.

Same as American Studies 356. Traces the development of American culture and society from the end of the Civil War to the present. Major themes include racial conflict, pluralism, religion, urban development and reform, modernism, government centralization, cultural radicalism, and the rebirth of conservatism. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 356P. The United States in the Civil Rights Era.

Same as African and African Diaspora Studies 374D (Topic 17) and American Studies 321 (Topic 9). Examines United States history in the post-World War II era, including how civil rights and other racial issues helped shape the politics, popular culture, and social life of this period. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: The United States in the Civil Rights Era), 374D (Topic 17), American Studies 321 (Topic: The United States in the Civil Rights Era), 321 (Topic 9), History 356P, Mexican American Studies 374 (Topic: The United States in the Civil Rights Era), 374 (Topic 36).

#### HIS 356R. America and the Holocaust.

Same as American Studies 321 (Topic 4) and Jewish Studies 365 (Topic 1). Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 321 (Topic 4), 370 (Topic: America and the Holocaust), History 350L (Topic: America and the Holocaust), 356R, 365G (Topic: America and the Holocaust), Jewish Studies 361 (Topic: America and the Holocaust), 365 (Topic 1), Liberal

Arts Honors 350 (Topic: America and the Holocaust). Prerequisite: Upperdivision standing.

#### HIS 356S. American Presidency: 1789 to the Present.

Examines the presidency and the individuals who have held it, with an eye toward discovering trends of historical and contemporary interest. Three lecture hours a week for one semester. Only one of the following may be counted: History 350R (Topic: The History of the American Presidency), 350R (Topic 34: The History of the American Presidency), 356S, 365G (Topic 9: The History of the American Presidency).

#### HIS 357C. African American History to 1860.

Same as African and African Diaspora Studies 357C and American Studies 321E. Review of West African origins; New World settlement patterns, social life, and culture; discussion of the Atlantic slave trade, the development of capitalism and plantation slavery, and the origins of racism. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 357C, American Studies 321 (Topic: African American History to 1860), 321E, History 357C. Prerequisite: Upper-division standing.

#### HIS 357D. African American History since 1860.

Same as African and African Diaspora Studies 357D, American Studies 321F, and Urban Studies 353 (Topic 1). Survey of the history of African Americans in the United States from 1860 to the present: Emancipation, Reconstruction politics, migration and urbanization, and the evolution of African American culture; kinds of sources and methods valuable for analyzing African American life and culture. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 357D, American Studies 321 (Topic: African American History since 1860), 321F, History 357D, Urban Studies 353 (Topic 1). Prerequisite: Upper-division standing.

#### HIS 358M. History of Britain from 1783 through World War I.

Same as European Studies 346 (Topic 1). Surveys the political, social, economic, and intellectual history of Great Britain from the years preceding the outbreak of the French Revolution to the conclusion of World War I. Three lecture hours a week for one semester. European Studies 346 (Topic 1)and History 358M may not both be counted. Prerequisite: Upper-division standing.

#### HIS 358Q. Supervised Research.

Individual instruction. Prerequisite: Upper-division standing.

#### HIS 359N. History of Africa since 1800.

Same as African and African Diaspora Studies 359N. Development of sub-Saharan Africa from the end of the slave trade to independence. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 359P. History of East Africa.

Same as African and African Diaspora Studies 345. A survey of the history of Kenya, Tanzania, and Uganda from prehistoric times to the postindependence era. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 359R. History of West Africa.

Same as African and African Diaspora Studies 345C. A history of the West Africa region: the rise and fall of kingdoms, relations with Europe and Asia, the great revolutions of the nineteenth century, colonial administration, decolonization, and the search for economic development and political stability since independence. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 362G. Topics in European History.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 2: Vienna: Memory and the City.** Same as American Studies 370 (Topic 41), European Studies 346 (Topic 5), and Urban Studies 354 (Topic 7). Examines the ways in which cultural memory has shaped, and continues to shape, urban life in Vienna, Austria. Only one of the following may be counted: American Studies 315 (Topic: Vienna: Memory and the City), 370 (Topic 41), European Studies 306 (Topic: Vienna: Memory and the City), 346 (Topic 5), Geography 309 (Topic: Vienna: Memory and the City), History 306N (Topic: Vienna: Memory and the City), History 306N (Topic: Vienna: Memory and the City), History 305 (Topic: Vienna: Memory and the City), 354 (Topic 7). Additional prerequisite: Upper-division standing.

Topic 3: Introduction to the Holocaust. Same as European Studies 346 (Topic 17), Jewish Studies 364 (Topic 6), and Russian, East European, and Eurasian Studies 335 (Topic 17). Examines the mass killing of Jews and other victims in the context of Nazi Germany's quest for race and space during World War II. Only one of the following may be counted: European Studies 346 (Topic: Introduction to the Holocaust), 346 (Topic 17), History 362G (Topic: Introduction to the Holocaust), 362G (Topic 3), Jewish Studies 364 (Topic: Introduction to the Holocaust), 364 (Topic 6), Middle Eastern Studies 325 (Topic: Introduction to the Holocaust), Russian, East European, and Eurasian Studies 335 (Topic: Introduction to the Holocaust), 335 (Topic 17). Topic 5: Early Western Colonialism. Same as European Studies 346 (Topic 15). An examination of the phenomenon of colonialism, with an emphasis on the European expansion across the globe that began at the end of the western Middle Ages and continued throughout the early modern period. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic: Early Western Colonialism), 346 (Topic 15), History 362G (Topic: Early Western Colonialism), 362G (Topic 5).

**Topic 6: The First World War.** Examines the tensions and conflicts between 1914 and 1918 that set the stage for the violent twentieth century. History 362G (Topic: The First World War) and 362G (Topic 6) may not both be counted.

**Topic 7: Eastern Europe in the Twentieth Century.** Same as European Studies 346 (Topic 16) and Russian, East European, and Eurasian Studies 335 (Topic 16). Examines the major political, social, and cultural events that shaped Eastern European society in the twentieth century. Only one of the following may be counted: European Studies 346 (Topic: Eastern Europe in the 20th-Century), 346 (Topic 16), History 362G (Topic: Eastern Europe in the 20th-Century), 362G (Topic 7), Russian, East European, and Eurasian Studies 335 (Topic: Eastern Europe in the 20th-Century), 362G (Topic: Eastern Europe in the 20th-Century), 362G (Topic 7), Russian, East European, and Eurasian Studies 335 (Topic: Eastern Europe in the 20th-Century), 362G (Topic 20th-Century), 335 (Topic 16).

**Topic 8: Jews of Eastern Europe.** Same as Jewish Studies 364 (Topic 7), Religious Studies 357 (Topic 13), and Russian, East European, and Eurasian Studies 335 (Topic 23). Explores the history and culture of Jews in Eastern Europe. Only one of the following may be counted: History 362G (Topic: Jews of Eastern Europe), 362G (Topic 8), Jewish Studies 364 (Topic: Jews of Eastern Europe), 364 (Topic 7), Religious Studies 357 (Topic: Jews of Eastern Europe), 357 (Topic 13), Russian, East European, and Eurasian Studies 335 (Topic: Jews of Eastern Europe), 335 (Topic 23).

**Topic 9: Southeast Europe in the Twentieth Century.** Same as European Studies 346 (Topic 18), Jewish Studies 364 (Topic 8), and Russian, East European, and Eurasian Studies 335 (Topic 18). Explores the key events and developments of Southeastern Europe, the region commonly referred to as the Balkans, in the twentieth century. Only one of the following may be counted: European Studies 346 (Topic: Southeast Europe in the Twentieth Century), 346 (Topic 18), History 362G (Topic: Southeast Europe in the Twentieth Century), 362G (Topic 9), Jewish Studies 364 (Topic: Southeast Europe in the Twentieth Century), 364 (Topic 8), Russian, East European, and Eurasian Studies 335 (Topic: Southeast Europe in the Twentieth Century), 335 (Topic 18).

**Topic 12: Heretics and Freedom Fighters, 1350-1650.** Same as European Studies 346 (Topic 8), German, Scandinavian, and Dutch Studies 360 (Topic 3), and Religious Studies 357 (Topic 12). Explores the theologies, politics, and personal identities that emerged and passed away in this era. Only one of the following may be counted: Czech 324 (Topic: Heretics and Freedom Fighters, 1350-1650), 324 (Topic 4), European Studies 346 (Topic: Heretics and Freedom Fighters, 1350-1650), 346 (Topic 8), Germanic Civilization 327E (Topic: Heretics and Freedom Fighters, 1350-1650), German, Scandinavian, and Dutch Studies 360 (Topic 3), History 362G (Topic: Heretics and Freedom Fighters, 1350-1650), 362G (Topic 12), Religious Studies 357 (Topic: Heretics and Freedom Fighters, 1350-1650), 357 (Topic 12), Russian, East European, and Eurasian Studies 325 (Topic: Heretics and Freedom Fighters, 1350-1650), 325 (Topic 28).

**Topic 13: The World of the Victorians.** Introduction to the main contours of social and cultural British history, both in Britain and in its burgeoning empire. History 362G (Topic: The World of the Victorians) and 362G (Topic 13) may not both be counted.

**Topic 14: The Church and the Jews.** Same as European Studies 346 (Topic 28), Jewish Studies 364 (Topic 10), and Religious Studies 357 (Topic 9). Examination of the complex relationship between the Western Church and Jews over two millenia. Only one of the following may be counted: European Studies 346 (Topic: The Church and the Jews), 346 (Topic 28), History 362G (Topic: The Church and the Jews), 362G (Topic 14), Jewish Studies 364 (Topic: The Church and the Jews), 364 (Topic 10), Religious Studies 357 (Topic: The Church and the Jews), 357 (Topic 9). Additional prerequisite: Upper-division standing.

**Topic 15: Rebels and Revolutionaries in Russian History and Literature.** Same as Comparative Literature 323 (Topic 20) and Russian, East European, and Eurasian Studies 325 (Topic 24). Study of fictional and real rebels and revolutionaries across almost a century of Russian literature. Only one of the following may be counted: Comparative Literature 323 (Topic: Rebels and Revolutionaries in Russian History and Literature), 323 (Topic 20), History 362G (Topic: Rebels and Revolutionaries in Russian History and Literature), 362G (Topic 15), Russian 356 (Topic: Rebels and Revolutionaries in Russian History and Literature), 356 (Topic 4), Russian, East European, and Eurasian Studies 325 (Topic: Rebels and Revolutionaries in Russian History and Literature), 325 (Topic 24). Additional prerequisite: Upperdivision standing.

#### Topic 16: Food History.

**Topic 17: Berlin.** Same as Comparative Literature 323 (Topic 44), European Studies 347 (Topic 34), German, Scandinavian, and Dutch Studies 361M, and Urban Studies 353 (Topic 7). Three lecture hours a week for one semester. Only one of the following may be counted: Comparative Literature 323 (Topic: Berlin), 323 (Topic 44), European Studies 347 (Topic: Berlin), 347 (Topic 34), German, Scandinavian, and Dutch Studies 360 (Topic: Berlin), 361M, Germanic Civilization 327E (Topic: Berlin), History 362G (Topic: Berlin), 362G (Topic 17), Urban Studies 353 (Topic: Berlin), 353 (Topic 7). Additional prerequisite: Upper-division standing.

**Topic 19: The Sacred and the Secular in Modern European Thought.** Same as Core Texts and Ideas 335 (Topic 7), European Studies 346 (Topic 32), and Religious Studies 357 (Topic 20). Introduces key themes and methodologies of intellectual history and social theory by exploring the dueling approaches to secularization and sacralization in modern European thought. Only one of the following may be counted: Core Texts and Ideas 335 (Topic 7), European Studies 346 (Topic: Sacred and Secular in Modern European Thought), 335 (Topic 7), European Studies 346 (Topic: Sacred and Secular in Modern European Thought), 346 (Topic 32), History 362G (Topic: Sacred and Secular in Modern European Thought), 362G (Topic 19), Religious Studies 357 (Topic: Sacred and Secular in Modern European Thought), 357 (Topic 20). Additional prerequisite: Upper-division standing.

#### HIS 362K. Medieval Civilization.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 1: Medieval Warfare.** An in-depth examination of the development of warfare between the late Roman Empire and the early modern world (c. 400-1500). Also includes a brief retrospective on war in the ancient world. History 362K (Topic: Medieval Warfare) and 362K (Topic 1) may not both be counted.

#### HIS 362P. Spinoza and Modernity.

Same as Core Texts and Ideas 321F, European Studies 346 (Topic 21), Jewish Studies 364 (Topic 9), Philosophy 354 (Topic 7), and Religious Studies 357 (Topic 8). Introduction to the core of Spinoza's writings and the diverse reactions they have elicited. Examines Spinoza's refusal of mind-body dualism, as well as a transcendent god or ideal as a way of understanding Spinoza's concepts and ideas. Three lecture hours a week for one semester. Only one of the following may be counted: Core Texts and Ideas 335 (Topic: Spinoza and Modernity), 321F, European Studies 346 (Topic: Spinoza and Modernity), 346 (Topic 21), 347 (Topic: Spinoza and Modernity), History 362G (Topic: Spinoza and Modernity), 362P, Jewish Studies 364 (Topic: Spinoza and Modernity), 354 (Topic 9), Philosophy 334K (Topic: Spinoza and Modernity), 354 (Topic: Spinoza and Modernity), 354 (Topic 7), Religious Studies 357 (Topic: Spinoza and Modernity), 357 (Topic 8). Prerequisite: Upper-division standing.

#### HIS 363K. Topics in Latin American History.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 1: Cultural Citizenship in the United States and Latin America.** Same as Latin American Studies 366 (Topic 27). An introduction to the history of relations between the United States and Latin America. Designed to prepare each student for a potential experience in Latin America (or with Latino communities in the United States) such as study abroad, research, and/or community engagement. Three lecture hours a week for one semester. Only one of the following may be counted: History 363K (Topic: Cultural Citizenship in the United States and Latin America), 363K (Topic 1), Latin American Studies 366 (Topic: Cultural Citizenship in the United States and Latin America), 366 (Topic 27).

Topic 2: Argentina: Populism and Insurrection. Same as Latin American Studies 366 (Topic 28). An overview of principal trends and issues in Argentine history from independence to the present. Only one of the following may be counted: History 363K (Topic: Argentina: Populism and Insurrection), 363K (Topic 2), Latin American Studies 366 (Topic: Argentina: Populism and Insurrection), 366 (Topic 28). Topic 3: Religion, Conquest, and Conversion in Colonial Latin America. Same as Latin American Studies 366 (Topic 29) and Religious Studies 368 (Topic 4). Focuses on the histories of the Catholic Church and religious devotion in colonial Latin America between 1521 and 1821. Only one of the following may be counted: History 363K (Topic: Religion, Conquest, and Conversion in Colonial Latin America), 363K (Topic 3), Latin American Studies 366 (Topic: Religion, Conquest, and Conversion in Colonial Latin America), 366 (Topic 29), Religious Studies 368 (Topic: Religion, Conquest, and Conversion in Colonial Latin America), 368 (Topic 4).

**Topic 4: Mapping Latin America.** Same as Geography 356T (Topic 12) and Latin American Studies 330 (Topic 4). Discuss the role of maps in the creation of Latin America as a specific sort of place. As such, allows familiarity with a broad overview of Latin American history

from Pre-Columbian civilizations to the modern period. Only one of the following may be counted: Geography 356T (Topic: Mapping Latin America), 356T (Topic 12), History 363K (Topic: Mapping Latin America), 363K (Topic 4), Latin American Studies 330 (Topic: Mapping Latin America), 330 (Topic 4). Additional prerequisite: Upper-division standing.

**Topic 5: The Bible in the Colonial Americas.** Same as Core Texts and Ideas 375 (Topic 6), Latin American Studies 366 (Topic 34), and Religious Studies 366 (Topic 3). Varied perspectives on the central role played by the Old Testament in the construction of colonial cultures in the Americas. Only one of the following may be counted: Core Texts and Ideas 375 (Topic: The Bible in the Colonial Americas), 375 (Topic 6), History 363K (Topic: The Bible in the Colonial Americas), 363K (Topic 5), Latin American Studies 366 (Topic: The Bible in the Colonial Americas), 366 (Topic 34), Religious Studies 366 (Topic: The Bible in the Colonial Americas), 366 (Topic 3). Additional prerequisite: Upper-division standing.

# HIS 364G. Topics in African, Asian, and Middle Eastern History.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

Topic 1: History of Hindu Religious Traditions. Same as Anthropology 324L (Topic 23: History of Hindu Religious Traditions), Asian Studies 340 (Topic 4: History of Hindu Religious Traditions), and Religious Studies 321. History of major doctrines, practices, and institutions that shaped the development of Hinduism; how religions adapt to social and cultural change and often provide the catalyst for change. Topic 2: Prophet of Islam: His Life and Times. Same as Islamic Studies 340 (Topic 1) and Religious Studies 325. A detailed study of the prophet Muhammad's life and message, and of the means by which his life was recorded and popularized. Only one of the following may be counted: History 364G (Topic 2), Islamic Studies 340 (Topic 1), Religious Studies 325. Additional prerequisite: Upper-division standing.

**Topic 3: The Dead Sea Scrolls.** Same as Ancient History and Classical Civilization 330 (Topic 1), Jewish Studies 364 (Topic 4), Middle Eastern Languages and Cultures 321 (Topic 17), Middle Eastern Studies 342 (Topic 23), and Religious Studies 353D. Three lecture hours a week for one semester. Only one of the following may be counted: Ancient History and Classical Civilization 330 (Topic: The Dead Sea Scrolls), 330 (Topic 1), History 364G (Topic 3), Jewish Studies 364 (Topic 4), Middle Eastern Languages and Cultures 321 (Topic 17), 342 (Topic 23), Religious Studies 353D. Additional prerequisite: Upper-division standing.

**Topic 4: African History in Films and Photographs.** Same as African and African Diaspora Studies 372G (Topic 32). Designed to increase understanding of the social, economic, and political challenges of the past fifty years of Africa's history through an examination of several popular films. Only one of the following may be counted: African and African Diaspora Studies 374C (Topic: African History in Films and Photographs), 372G (Topic: African History in Films and Photographs), 372G (Topic 32), History 364G (Topic: African History in Films and Photographs), 364G (Topic 4).

**Topic 5: African Women's History.** Same as African and African Diaspora Studies 372G (Topic 6) and Women's and Gender Studies 340 (Topic 32). Major themes include politics, economics, religion, the family, culture, technology, feminism, colonialism, nationalism, and development in relation to the lives of African women. Only one of the followed may be counted: African and African Diaspora Studies 372G (Topic 6), 374C (Topic: African Women's History), History 364G (Topic: African Women's History), 364G (Topic 5), Women's and Gender Studies 340 (Topic: African Women's History), 340 (Topic 32).

**Topic 6: Apartheid: South African History.** Same as African and African Diaspora Studies 374C (Topic 6) and Women's and Gender Studies 340 (Topic 42). A study of the social, political, economic, and cultural history of South Africa to contextualize the rise of apartheid. Primarily focuses on the period since 1948 from the perspectives of women, children, and men of all racial backgrounds who lived through that particular period. Only one of the following may be counted: African and African Diaspora Studies 374C (Topic: Apartheid and Resistance in South Africa), 374C (Topic: Apartheid: South African History), 374C (Topic 6), History 364G (Topic: Apartheid: South African History), 364G (Topic: Apartheid and Resistance in South Africa), 364G (Topic 6), Women's and Gender Studies 340 (Topic: Apartheid: South African History), 340 (Topic 42).

**Topic 7: French Empire: The West and Islam.** Same as Islamic Studies 372 (Topic 22) and Religious Studies 358 (Topic 16). The development of regions within the Mediterranean, variously called the West and East or Europe and Islam, with an emphasis on the role of modern France and France's Mediterranean empire. Three lecture hours for one semester. Only one of the following may be counted: History 364G (Topic: French Empire: The West and Islam), 364G (Topic 7), Islamic Studies 372 (Topic: French Empire: The West and Islam), 372 (Topic 22), Middle Eastern Studies 343 (Topic: French Empire: The West and Islam), 378 (Topic 358 (Topic: French Empire: The West and Islam), 358 (Topic 16).

**Topic 8: Modernization in East Asia.** Same as Asian Studies 361 (Topic 34). Examines the different historical experiences of mainland China and Taiwan in the context of the East Asian model of development. Only one of the following may be counted: Asian Studies 361, 461 (Topic: Modernization in East Asia), 361 (Topic 34), History 364G (Topic: Modernization in East Asia), 364G (Topic 8).

**Topic 9: The Histories of African Liberation.** Same as African and African Diaspora Studies 372G (Topic 20). Examination of important figures, movements, strategies, and factors that contributed to decolonization on the African continent. Only one of the following may be counted: African and African Diaspora Studies 372G (Topic: Histories of African Liberation), 372G (Topic 20), History 364G (Topic: Histories of African Liberation), 364G (Topic: 9).

**Topic 10: Gender and Sexuality in Japan.** Same as Asian Studies 372 (Topic 30) and Women's and Gender Studies 340 (Topic 28). Examines gender and sexuality in Japan during the classical (Heian), early modern (Tokugawa or Edo), and modern periods. Considers the construction and representation of feminine and masculine gender and sexuality, both normative and otherwise. Only one of the following may be counted: Asian Studies 372 (Topic: Gender and Sexuality in Japan), 372 (Topic 30), History 364G (Topic: Gender and Sexuality in Japan), 364G (Topic 10), Women's and Gender Studies 340 (Topic: Gender and Sexuality in Japan), 340 (Topic 28).

**Topic 12: Business and Society in South Asia.** Same as Asian Studies 361 (Topic 46). Introduction to the long history of commerce and enterprise in the Indian sub-continent up to the present. Three lecture hours a week for one semester. Only one of the following may be counted: Asian Studies 361 (Topic: Business and Society in South Asia), 361 (Topic 46), History 364G (Topic: Business and Society in South Asia), 364G (Topic 12).

**Topic 13: Gender and Modern India.** Same as Asian Studies 361 (Topic 44). Examines gender and the shifting nature of modernity between precolonial and colonial periods in the Indian subcontinent. Three lecture hours a week for one semester. Only one of the following may be counted: Asian Studies 361 (Topic: Gender and Modern India), 361 (Topic 44), History 364G (Topic: Gender and Modern India), 364G (Topic 13).

**Topic 14: History of the Pilgrimage to Mecca, Hajj.** Same as Middle Eastern Studies 343 (Topic 7) and Religious Studies 358 (Topic 24). Survey of the Hajj, Islam's major pilgrimage to Mecca and the nearby Holy Places. It will examine the Islamic pilgrimage from its beginnings

in the seventh century C.E. through today. Three lecture hours a week for one semester. Only one of the following may be counted: History 364G (Topic: History of the Pilgrimage to Mecca, Hajj), 364G (Topic 14), Middle Eastern Studies 343 (Topic: History of the Pilgrimage to Mecca, Hajj), 343 (Topic 7), Religious Studies 358 (Topic: History of the Pilgrimage to Mecca, Hajj), 358 (Topic 24).

**Topic 16: Slavery and South Asian History.** Same as Asian Studies 361 (Topic 43). Discuss the presence of slavery in the subcontinent in the third century BCE to the twentieth century. Three lecture hours a week for one semester. Only one of the following may be counted: Asian Studies 361 (Topic: Slavery and South Asian History), 361 (Topic 43), History 364G (Topic: Slavery and South Asian History), 364G (Topic 16).

#### HIS 365G. Topics in United States History.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 1: United States Catholic History.** Same as American Studies 327 (Topic 4), Mexican American Studies 374 (Topic 37), and Religious Studies 346 (Topic 5). Examines how Catholicism and national identity work for Catholics in the United States, with an emphasis on Catholic women and Latinos/as. Only one of the following may be counted: American Studies 321 (Topic: United States Catholic History), 327 (Topic 4), History 365G (Topic: United States Catholic History), 365G (Topic 1), Mexican American Studies 374 (Topic: United States Catholic History), 374 (Topic 37), Religious Studies 346 (Topic: United States Catholic History), 346 (Topic 5).

**Topic 2: Popular Music in the United States.** Same as American Studies 325C. Traces the history of popular music in the United States and its influence on American politics, economics, and culture from the 1880s to present day. Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 321 (Topic: Popular Music in the US), 325C, History 365G (Topic: Popular Music in the US), 365G (Topic 2). Additional prerequisite: Upper-division standing.

**Topic 3: United States Economic History since 1880.** The history of American capitalism from 1865 to 2000; examines innovation, economic rights, and the role of the state. History 365G (Topic: United States Economic History since 1880) and 365G (Topic 3) may not both be counted.

**Topic 4: The Vietnam Wars.** Same as American Studies 321 (Topic 11). Introduction to the complex and controversial history of the wars fought in Vietnam from 1941 to the 1980s. Only one of the following may be counted: American Studies 321 (Topic: Vietnam Wars), 321 (Topic 11), Asian Studies 372 (Topic: Vietnam Wars), History 365G (Topic: Vietnam Wars), 365G (Topic 4).

**Topic 5: Science, Ethics, and Society.** Explores the ethics of scientific experimentation on humans in the nineteenth and twentieth centuries. History 365G (Topic: Science, Ethics, and Society) and 365G (Topic 5) may not both be counted.

Topic 6: Antebellum Slavery. Same as African and African Diaspora Studies 374D (Topic 16) and Women's and Gender Studies 340 (Topic 33). Examination of slavery at its maturity during the nineteenth century. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: Antebellum Slavery), 374D (Topic 16), History 365G (Topic: Antebellum Slavery), 365G (Topic 6), Women's and Gender Studies 340 (Topic: Antebellum Slavery), 340 (Topic 33). Topic 7: Texas Black History. Same as African and African Diaspora Studies 374D (Topic 15). Surveys the history of blacks in Texas from before American settlement to the present. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: Texas Black History), 374D (Topic 15), History 365G (Topic: Texas Black History), 365G (Topic 7).

#### Topic 8: Women and Social Movements in the Twentieth-Century

**United States.** Same as African and African Diaspora Studies 372C (Topic 7), American Studies 321 (Topic 10), and Women's and Gender Studies 340 (Topic 53). Examines women's participation in well-known and lesser-known social movements during the twentieth century. Only one of the following may be counted: African and African Diaspora Studies 372C (Topic: Women and Socl Mvmnts in US), 372C (Topic 7), American Studies 321 (Topic: Women/Social Movements in US), 321 (Topic 10), History 365G (Topic: Women/Social Movements in US), 365G (Topic 8), Women's and Gender Studies 340 (Topic: Women/Social Movements in Socl Movements in the US, 340 (Topic 53).

Topic 10: Twentieth-Century United States Lesbian and Gay History. Same as American Studies 370 (Topic 49) and Women's and Gender Studies 335 (Topic 18). Examines classic texts and recent and varied writings on LGBT history, focused on experiences, ideas, and conflicts that have shaped modern LGBT identities. Only one of the following may be counted: American Studies 370 (Topic: United States Lesbian and Gay History, Twentieth Century), 370 (Topic 49), History 365G (Topic: United States Lesbian and Gay History, Twentieth Century), 365G (Topic 10), Women's and Gender Studies 335 (Topic 18), 340 (Topic: United States Lesbian and Gay History, Twentieth Century). Topic 11: History of the Southeast Asian Diaspora in the United States. Same as Asian American Studies 325 (Topic 8). Only one of the following may be counted: Asian American Studies 325 (Topic: History of the Southeast Asian Diaspora in the United States), 325 (Topic 8), History 365G (Topic: History of the Southeast Asian Diaspora in the United States), 365G (Topic 11). Additional prerequisite: Upper-division standing.

**Topic 12: History of the United States-Mexico Borderland.** Same as Mexican American Studies 364. Introduction to the history of the United States and Mexico border region. Three lecture hours a week for one semester. Only one of the following may be counted: History 365G (Topic: History of the United States-Mexico Borderland), 365G (Topic 12), Mexican American Studies 364, 374 (Topic: History of the United States-Mexico Borderland). Additional prerequisite: Upperdivision standing.

**Topic 13: Race, Law, and United States Society.** Same as African and African Diaspora Studies 360 and American Studies 370 (Topic 5). Examines the intersection of racial ideology and legal culture in the United States. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 360, 372F (Topic: Race, Law, and US Society), American Studies 370 (Topic: Race, Law, and US Society), 370 (Topic 5), History 365G (Topic: Race, Law, and US Society), 365G (Topic 13). Additional prerequisite: Upper-division standing.

**Topic 14: South Asian Migration to the United States.** Same as Asian American Studies 325 (Topic 9), Asian Studies 372 (Topic 43), and Women's and Gender Studies 340 (Topic 35). Examines the South Asian diaspora in the United States. Only one of the following may be counted: Asian American Studies 325 (Topic: South Asian Migration to the United States), Asian American Studies 325 (Topic 9), Asian Studies 372 (Topic: South Asian Migration to the United States), Asian Studies (Topic 43), History 365G (Topic: South Asian Migration to the United States), History 365G (Topic 14), Women and Gender Studies 340 (Topic: South Asian Migration to the United States), Women and Gender Studies 340 (Topic 35). Additional prerequisite: Upper-division standing.

#### HIS 366N. Topics in History.

Three lecture hours or two lecture hours and one laboratory/discussion hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 15: Anti-Semitism.** Same as Jewish Studies 365 (Topic 13) and Sociology 321S. Surveys trends in Judeophobia/anti-Semitism over

2,500 years in both Christian and non-Christian societies. Designed to use anti-Semitism as way to explore more general ideas in social theory such as boundary making; models of racial, ethnic, and cultural conflict; and the role of intellectual and scientific elites. Three lecture hours a week for one semester. Only one of the following may be counted: History 366N (Topic: Anti-Semitism), 366N (Topic 15), Jewish Studies 365 (Topic: Anti-Semitism), 365 (Topic 13), Sociology 321K (Topic: Anti-Semitism), 321S. Additional prerequisite: Upper-division standing.

**Topic 17: British History, Literature, and Politics.** Reading course in history, literature, and politics, and as a class in professional writing. Examines not only the literature, history, and politics of England, Wales, Scotland, and Ireland, but also the interaction of British and other societies throughout the world. Only one of the following may be counted: History 366N (Topic: British History, Literature and Politics), 366N (Topic 17), Liberal Arts Honors 350 (Topic: British History, Literature and Politics), Tutorial Course 325 (Topic: British History, Literature and Politics). Additional prerequisite: A grade point average of at last 3.50.

**Topic 18: Global History of Disease.** Introduction to major themes in the history of medicine through the lens of disease. To be considered are the roles governments, medical practitioners, and patients play in the social construction of disease and health. Only one of the following may be counted: African and African Diaspora Studies 372D (Topic: Global History of Disease), History 366N (Topic: Global History of Disease), 366N (Topic 18).

#### HIS 372L. Proseminar in Historical Source Readings.

Individual instruction in reading history and historiography. The equivalent of three lecture hours a week for one semester. May be repeated for credit. Prerequisite: Upper-division standing and written consent of instructor; consent forms are available in the departmental advising office.

#### HIS 372M. Proseminar in Historical Writing.

Individual instruction in historical research and writing. The equivalent of three lecture hours a week for one semester. May be repeated for credit. Prerequisite: Upper-division standing and written consent of instructor; consent forms are available in the departmental advising office.

#### HIS 375D. Islamic Spain and North Africa to 1492.

Same as Middle Eastern Studies 343 (Topic 4) and Religious Studies 345. An introduction to the impact of Islam on Spain and North Africa, with emphasis on social, economic, and cultural development. Only one of the following may be counted: Ancient History and Classical Civilization 330 (Topic: Islamic Spain and North Africa to 1492), History 375D, Islamic Studies 373 (Topic: Islamic Spain and North Africa to 1492), Middle Eastern Studies 343 (Topic 4), Religious Studies 345, 363 (Topic: Islamic Spain and North Africa to 1492). Prerequisite: Upper-division standing.

#### HIS 375K. Tudor England, 1485-1603.

Exploration of the most important political, religious, social, economic, and intellectual changes that occurred in England between the accession of Henry VII and the death of Elizabeth I. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 375L. Stuart England, 1603-1689.

Topical lecture course focusing on the most significant political, religious, social, economic, and cultural developments in seventeenthcentury England. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 375M. Modern Spain, 1800 to the Present.

Political, social, and economic changes in the nineteenth century: the Second Republic; the Spanish Civil War; the Franco Era and the transition to democracy after 1975. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HIS 376F. The United States and the Second World War.

Restricted to students in the Normandy Scholars Program. Three lecture hours a week for one semester, and approximately three weeks of study in France.

#### HIS 376G. Hitler, Nazism, and World War II.

Restricted to students in the Normandy Scholars Program. Three lecture hours a week for one semester, and approximately three weeks of study in France. Offered on the letter-grade basis only.

#### HIS 378W. Capstone in History.

Pursue in-depth the research interests and skills developed in other history classes. Three lecture hours a week for one semester. Prerequisite: History 318W and twelve semester hours of coursework in history.

#### HIS 679H. Honors Tutorial Course.

An individual instruction course to provide training in the methods and teaching of historical research and writing. The equivalent of three semester hours a week for two semesters. May not be included in the thirty semester hours of coursework required for the major. Prerequisite: For 679HA, upper-division standing and admission to the History Honors Program; for 679HB, History 679HA.

# Human Dimensions of Organizations

### Human Dimensions of Organizations: HDO

### **Lower-Division Courses**

# HDO 301. Introduction to the Human Dimensions of Organizations.

Introduction to organizations and how the liberal arts can examine, analyze, and change them. Defines organizations from a liberal arts standpoint; survey of career opportunities related to the human dimensions of organizations. Three lecture hours a week for one semester.

### **Upper-Division Courses**

# HDO 320. Multidisciplinary Methods for Exploring Organizations.

Analyze and synthesize organizational studies from a liberal arts viewpoint. Examine types of organizations, explore problems these organizations face, and consider the ways distinct methodologies might address these problems. Three lecture hours a week for one semester. Prerequisite: Human Dimensions of Organizations 301 with a grade of at least B-.

#### HDO 330. Topics in Human Dimensions of Organizations.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and Human Dimensions of Organizations 301.

#### HDO 359H. Honors Research I.

The equivalent of three lecture hours a week for one semester. Prerequisite: Human Dimensions of Organizations 301 and 320 with a grade of at least B-; and admission to the honors program.

#### HDO 379. Applying the Human Dimensions of Organizations.

Restricted to human dimensions of organizations majors. Explores multidisciplinary methods of the human dimensions of organizations with an external entity. Focus on the role of the liberal arts viewpoint in practical settings. Three lecture hours a week for one semester. Prerequisite: Upper-division standing, Human Dimensions of Organizations 320, and consent of adviser.

#### HDO 379H. Honors Research II.

Supervised conference course for honors candidates in Human Dimensions of Organizations. The equivalent of three lecture hours a week for one semester. Prerequisite: Human Dimensions of Organizations 359H with a grade of at least A-.

### **Humanities Program**

### **Humanities: HMN**

#### **Lower-Division Courses**

#### HMN 101. Community Service.

Tutorial course, in which the student submits a report based on a community service project and appropriate supplementary reading. Conference course. Prerequisite: Consent of the humanities adviser.

#### HMN 305. Freshman Seminar.

Reading, discussion, writing, and oral reporting on various humanities topics. Three lecture hours a week for one semester. Humanities 305 and Liberal Arts Honors 305 may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Advanced placement credit for Rhetoric and Writing 306 or the equivalent.

Topic 1: Epic Journeys.

#### HMN 110, 210, 310. Internship.

Students work in a professional environment, applying analytical, communication, and other academic skills to practical work. For each semester hour of credit earned, one lecture hour and ten hours of fieldwork a week for one semester. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: Consent of the humanities director.

#### HMN 116, 216, 316. Topics in the Humanities.

Intensive lecture or seminar course addressing topics in various disciplines in the humanities. For each semester hour of credit earned, one lecture hour a week for one semester. Humanities 116 and Liberal Arts Honors 103H may not both be counted. May be repeated for credit when the topics vary. Prerequisite: Consent of the humanities adviser.

#### HMN 318Q. Supervised Research.

Individual instruction. Prerequisite: Consent of the humanities adviser.

#### **Upper-Division Courses**

## HMN 321. Humanism and Western Civilization: The Ancient World.

A history of humanism in ancient Greece and Rome. The contributions of humanism to the values we place on the individual and human potential, democratic government, the arts, religion, and the family. Three lecture hours a week for one semester. Prerequisite: Upper-division standing or consent of instructor.

### HMN 322. Humanism and Western Civilization: The Renaissance.

A history of humanism during the European Renaissance, the thirteenth through the sixteenth century. The contributions of humanism to the

values we place on the individual and human potential, democratic government, the arts, religion, and the family. Three lecture hours a week for one semester. Prerequisite: Upper-division standing or consent of instructor.

# HMN 323. Humanism and Western Civilization: The Enlightenment.

A history of humanism during the Enlightenment. The contributions of humanism to the values we place on the individual and human potential, democratic government, the arts, religion, and the family. Three lecture hours a week for one semester. Prerequisite: Upper-division standing or consent of instructor.

#### HMN 125K. The Arts, Sciences, and Social Sciences.

Analysis of topics in the arts, sciences, and social sciences through reading, discussion, and lectures. One lecture hour a week for one semester. May be repeated for credit. Prerequisite: Consent of the humanities adviser.

#### HMN 350. Topics in the Humanities.

Study of the values underlying humanistic disciplines. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

#### Topic 2: Daily Life in Northern Europe.

**Topic 3: Geography and Religion.** Same as Geography 358E. Ideas about the relationships among the natural world, myth, and ritual; principal focus on Christianity, Islam, and Judaism and their offshoots and antagonists in the Western world. Geography 358E and Humanities 350 (Topic 3) may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 4: Reading Images: Icons and Beliefs.** The content (not the aesthetics or the technical, compositional features) of selected Renaissance paintings, sculptures, and prints. Additional prerequisite: Upper-division standing.

**Topic 5: Great Trials in Western History.** The intellectual and historical importance of a variety of significant trials in Western history. Humanities 350 (Topic 5) and Liberal Arts Honors 350 (Topic: Great Trials in Western History) may not both be counted.

**Topic 6: In Search of Meaning.** Restricted to Plan I majors in the College of Liberal Arts. Intensive lecture course exploring various disciplinary perspectives and values underlying humanistic disciplines. Concepts include: monotheism, the nature and personality of this god, the soul, chosen people, linear time, history as divine classroom, original sin, heaven, hell, salvation, etc. Establishes how and when these and a host of other features came into existence and created Judeo-Christian reality, and contrast the reality created therein with other realities, such as Hinduism, Buddhism, Confucianism, and Islam. Only one of the following may be counted: Humanities 350 (Topic: In Search of Meaning), 350 (Topic: In Search of Meaning), 350 (Topic: 10). Additional prerequisite: Upper-division standing and a University grade point average of at least 3.50.

#### Topic 7: The Enlightenment.

**Topic 8: Sites, Structures, and Images of Italy.** Examination of the historical factors of religion, politics, economics, and local culture that define the significance of selected late medieval and Renaissance (twelfth through fifteenth century) buildings and the visual art they formerly housed and displayed. Taught in Italy. Additional prerequisite: Upper-division standing and consent of instructor.

**Topic 10: Literature of World War I.** Same as Liberal Arts Honors 350 (Topic 4). Selected readings from autobiographies, poetry, fiction, and memoirs, primarily about the Western Front, by German, British, and American authors; a short history of World War I; readings of a central book of literary analysis; exploration of the nature of war,

the experience of combatants, and the legacy of the war itself and its unique literature. Only one of the following may be counted: Humanities 350 (Topic: Literature of the Great War), 350 (Topic 10), Liberal Arts Honors 350 (Topic: Literature of the Great War), 350 (Topic 4).

**Topic 11: Russia and Its World.** Same as Comparative Literature 323 (Topic 21) and Russian, East European, and Eurasian Studies 325 (Topic 21). Survey of the political, cultural, and social history of Russia, from its prehistoric origins to the installation of communist rule in 1917. Emphasis on the arts and on enduring themes of cultural identity, imagination, and conflict with neighboring peoples and within Russia. Only one of the following may be counted: Comparative Literature 323 (Topic: Russia and Its World), 323 (Topic 21), Humanities 350 (Topic: Russia and Its World), 350 (Topic 11), Russian 330 (Topic: Russia and Its World), 330 (Topic 11), Russian, East European, and Eurasian Studies 325 (Topic: Russia and Its World), 325 (Topic 21). Additional prerequisite: Upper-division standing.

**Topic 12: Twentieth-Century Russian Culture.** Same as Comparative Literature 323 (Topic 22) and Russian, East European, and Eurasian Studies 325 (Topic 14). Survey of the political, social, and cultural history of Russia during the Soviet period, from the revolutionary events of 1917 until the dissolution of the Soviet government and political system in December 1991. Only one of the following may be counted: Comparative Literature 323 (Topic: Twentieth-Century Russian Culture), 323 (Topic 22), Humanities 350 (Topic: Twentieth-Century Russian Culture), 350 (Topic 12), Russian 330 (Topic: Twentieth-Century Russian Culture), 330 (Topic 7), Russian, East European, and Eurasian Studies 325 (Topic: Twentieth-Century Russian Culture), 325 (Topic 14). Additional prerequisite: Upperdivision standing.

#### HMN 358Q. Supervised Research.

Individual instruction. May be repeated for credit. Prerequisite: Consent of the humanities adviser.

#### HMN 370. Senior Tutorial Course.

A tutorial program of supervised reading and writing, including an individual paper or papers in which the student draws together the central directions and discoveries of his or her studies in the humanities. Three lecture hours a week for one semester. Humanities 370 and 679HB may not both be counted. Prerequisite: Consent of the humanities adviser.

#### HMN 379. Conference Course.

Individual instruction in a topic approved by the instructor and the humanities adviser. Conference course. May be repeated for credit. Prerequisite: Upper-division standing and consent of the humanities adviser.

#### HMN 679H. Honors Tutorial Course.

Directed reading and research, followed by the writing of a report or the creation of a project. Conference course for two semesters. Humanities 370 and 679HB may not both be counted. Prerequisite: For 679HA, admission to the Humanities Honors Program and consent of the humanities adviser; for 679HB, Humanities 679HA.

# International Relations and Global Studies Program

# International Relations and Global Studies: IRG

### **Lower-Division Courses**

# IRG 301. Introduction to International Relations and Global Studies.

Restricted to international relations and global studies majors. Three lecture hours a week for one semester. Prerequisite: Completion of at least twenty-four semester hours of college coursework.

### **Upper-Division Courses**

# IRG 320F. Foundations of International Relations and Global Studies.

Restricted to international relations and global studies majors. Survey of contemporary debates related to international relations and global studies. The equivalent of three lecture hours a week for one semester. Prerequisite: Upper-division standing and International Relations and Global Studies 301.

# IRG 378. Capstone Research in International Relations and Global Studies.

Restricted to international relations and global studies majors. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and International Relations and Global Studies 301 and 320F.

#### IRG 678H. Honors Tutorial Course.

Supervised individual research on an international relations and global studies topic. The equivalent of three lecture hours a week for two semesters. Prerequisite: For 678HA, upper-division standing, International Relations and Global Studies 301 with a grade of at least B, and admission to the International Relations and Global Studies Honors Program; for 678HB, International Relations and Global Studies 678HA.

# Schusterman Center for Jewish Studies

### Jewish Studies: J S

### **Lower-Division Courses**

#### J S 301. Introduction to Jewish Studies.

Jewish literature and Jewish thought, comprising a general introduction to biblical, rabbinic, philosophic, and literary Jewish texts from the sixth century BC to the twenty-first century CE. Emphasis on hermeneutics (interpretation). Three lecture hours a week for one semester.

#### J S 304M. Jewish Civilization: Beginnings to 1492.

Same as History 306N (Topic 10), Middle Eastern Studies 310 (Topic 6), and Religious Studies 313M. Introduction to the history, culture, and religion of the Jewish people from around 1000 BC to the end of the medieval period. Subjects may include ancient Israel, late Second Temple sectarianism, the rise of Christianity, rabbinic Judaism, medieval Jewish philosophy, Jewish mysticism, and Hebrew poetry. Three lecture hours a week for one semester. Only one of the following may be counted: History 306N (Topic: Jewish Civilization I), 306N (Topic 10), Jewish Studies 304M, 311 (Topic: Jewish Civilization I), Middle Eastern Studies 310 (Topic: Jewish Civilization: Beginnings to 1492), 310 (Topic 6), Religious Studies 313 (Topic: Jewish Civilization I), 313M.

#### J S 304N. Jewish Civilization: 1492 to the Present.

Same as European Studies 306 (Topic 4), History 306N (Topic 11), and Religious Studies 313N. Subjects may include trends toward secularization, the emancipation of European Jewry, the emergence of American Jewry, the Holocaust, the establishment of the State of Israel, and the Arab-Israeli conflict. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 306 (Topic: Jewish Civilization: 1492 to the Present), 306 (Topic 4), History 306N (Topic 11), Jewish Studies 304N, 311 (Topic: Jewish Civilization: 1492 to the Present), Religious Studies 313 (Topic: Jewish Civilization: 1492 to the Present), 313N.

#### J S 311. Topics in Jewish Studies.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 2: Judaism, Christianity, and Islam: An Introduction**. Same as History 304R, Islamic Studies 311 (Topic 2: Judaism, Christianity, and Islam: An Introduction), and Religious Studies 304. Examines the intertwined historical developments of the religions of Judaism, Christianity, and Islam, and explores the principal beliefs and practices of Jews, Christians, and Muslims.

**Topic 3: The Rise of Christianity.** Introduction to the origins and development of Christianity.

**Topic 4: Introduction to the Old Testament.** Same as Core Texts and Ideas 305G, Middle Eastern Studies 310 (Topic 3), and Religious Studies 313C. Introduction to the many interpretations of the Hebrew Bible (the Old Testament) and its meaning in the context of its historical and cultural setting in the ancient Near East. Three lecture hours a week for one semester. Only one of the following may be counted: Core Texts and Ideas 305G, 310 (Topic: Introduction to the Hebrew Bible), Jewish Studies 311 (Topic: Introduction to the Hebrew Bible), 311 (Topic 4), Middle Eastern Studies 310 (Topic: Introduction to the Hebrew Bible), 310 (Topic 3), Religious Studies 313 (Topic: Introduction to the Hebrew Bible), 313C.

**Topic 5: The Roots of Religious Toleration.** Same as European Studies 306 (Topic 3), History 317N (Topic 1), and Religious Studies 306 (Topic 1). Examines how freedom of conscience and religion crystallized in western and central Europe, both as a pragmatic practice and as a matter of principle. Only one of the following may be counted: Core Texts and Ideas 310 (Topic: Roots of Religious Toleration), European Studies 306 (Topic: Roots of Religious Toleration), 306 (Topic 3), History 317N (Topic: Roots of Religious Toleration), 317N (Topic 1), Jewish Studies 311 (Topic: Roots of Religious Toleration), 311 (Topic 5), Religious Studies 306 (Topic: Roots of Religious Toleration), 306 (Topic 1).

**Topic 7: The History of Israel.** An introduction to the history of Israel, from the emergence of the modern Zionist movement beginning in 1881 to the present. Only one of the following may be counted: History 306N (Topic: History of Israel), Jewish Studies 311 (Topic: History of Israel), 311 (Topic 7), Middle Eastern Studies 310 (Topic: History of Israel).

**Topic 9: American Jews: The Yiddish Experience.** Same as American Studies 315 (Topic 6), German, Scandinavian, and Dutch Studies 310 (Topic 1), and Religious Studies 316K (Topic 2). Focuses on over a century of Yiddish-based contributions to American literature, music, and film, including works by Isaac Bashevis Singer, Michael Chabon, Woody Allen, and the Marx Brothers. Only one of the following may be counted: American Studies 315 (Topic 6); German, Scandinavian, and Dutch Studies 310 (Topic 1), 315 (Topic 6); German, Scandinavian, and Dutch Studies 310 (Topic: Jews in America: The Yiddish Experience), 310 (Topic 1); Jewish Studies 311 (Topic: Jews in America: The Yiddish Experience), 311 (Topic 6), 311 (Topic 9); Religious Studies

313 (Topic: Jews in America: The Yiddish Experience), 313 (Topic 1), 316K (Topic 2).

### **Upper-Division Courses**

#### J S 361. Topics in Jewish Studies.

Three lecture hours a week for one semester; additional hours may be required for some topics. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

#### J S 362. Independent Research in Jewish Studies.

Tutorially directed research in Jewish studies. Conference course. May be repeated for credit. Prerequisite: Upper-division standing and consent of instructor.

#### J S 363. Topics in the Humanities and Arts.

Three lecture hours a week for one semester; additional hours may be required for some topics. Jewish Studies 361 and 363 may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 1: Anne Frank and Beyond. Prerequisite: Upper-division standing.

Topic 3: Film Adaptations of Israeli Literature. Prerequisite: Upperdivision standing.

**Topic 4: Israeli and American Jewish Fiction.** Prerequisite: Upperdivision standing.

**Topic 6: Key Yiddish Novels.** Prerequisite: Upper-division standing. **Topic 7: Love and the State in Contemporary Israeli Literature.** Same as Middle Eastern Languages and Cultures 321 (Topic 6) and Middle Eastern Studies 342 (Topic 6). Only one of the following may be counted: Comparative Literature 323 (Topic: Love and State in Contemporary Israeli Literature), English 322 (Topic: Love and State in Contemporary Israeli Literature), Jewish Studies 363 (Topic 7), Middle Eastern Languages and Cultures 321 (Topic 6), Middle Eastern Studies 342 (Topic 6), Women's and Gender Studies 340 (Topic: Love and State in Contemporary Israeli Literature). Additional prerequisite: Upper-division standing.

**Topic 8: Mizrahi Writing in Israel.** Same as Hebrew 346 (Topic 9) and Middle Eastern Studies 342 (Topic 9). Only one of the following may be counted: Hebrew 346 (Topic 9), Jewish 363 (Topic 8), Middle Eastern Studies 342 (Topic 9). Additional prerequisite: Upper-division standing, and Hebrew 412L (or 312L) or 320L with a grade of at least C.

**Topic 10: The Sacred and the Secular in Contemporary Jewish Literature.** Same as Middle Eastern Languages and Cultures 321 (Topic 8), Middle Eastern Studies 342 (Topic 8), and Religious Studies 353 (Topic 3). Only one of the following may be counted: Comparative Literature 323 (Topic: The Sacred and the Secular in Contemporary Jewish Literature), English 322 (Topic: The Sacred and the Secular in Contemporary Jewish Literature), Jewish Studies 363 (Topic 10), Middle Eastern Languages and Cultures 321 (Topic 8), Middle Eastern Studies 342 (Topic 8), Religious Studies 353 (Topic: The Sacred and the Secular in Contemporary Jewish Literature), 353 (Topic 3). Additional prerequisite: Upper-division standing.

**Topic 11: Women and the Holocaust.** Same as Comparative Literature 323 (Topic 19), European Studies 346 (Topic 10), German, Scandinavian, and Dutch Studies 341F, and Women's and Gender Studies 340 (Topic 50). Introduction to both the history of Jewish and German women during World War II and the Holocaust, and to women's narratives and self-representations of this period. Historical sources, memoirs, films, and interviews will be used as source material. Three lecture hours a week for one semester. Only one of the following may be counted: Comparative Literature 323 (Topic: Women's Narratives of the Holocaust and World War II), 323 (Topic 19), European Studies 346 (Topic: Women's Narratives of the Holocaust and World War II), 346 (Topic 10), German, Scandinavian, and Dutch Studies 341F, Germanic Civilization 323E (Topic: Women's Narratives of the Holocaust and World War II), Jewish Studies 363 (Topic 11), Women's and Gender Studies 340 (Topic: Women's Narratives of the Holocaust and World War II), 340 (Topic 50). Additional prerequisite: Upper-division standing.

**Topic 12: Yiddish Literature.** Prerequisite: Upper-division standing. **Topic 15: Jewish Voices from Latin America.** Same as Latin American Studies 328 (Topic 4) and Spanish Civilization 320C (Topic 1). An introduction to Jewish writers from Brazil and Latin America, with an emphasis on those whose works portray the situation of the Jewish communities in their respective cities and countries. Only one of the following may be counted: Jewish Studies 363 (Topic: Latin American Jewish Writers), 363 (Topic 15), Latin American Studies 328 (Topic 4), 370S (Topic: Latin American Jewish Writers), 370S (Topic 32), Spanish 352 (Topic), 355 (Topic 3), Spanish Civilization 320C (Topic 1). Additional prerequisite: Upper-division standing.

**Topic 17: Israel Through Its Literature.** Same as Comparative Literature 323 (Topic 15), Middle Eastern Languages and Cultures 321 (Topic 5), and Middle Eastern Studies 342 (Topic 5). Only one of the following may be counted: Comparative Literature 323 (Topic: Introduction to Israeli Literature), Comparative Literature 323 (Topic 15), English 322 (Topic: Introduction to Israeli Literature), Jewish Studies 363 (Topic 17), Middle Eastern Languages and Cultures 321 (Topic 5), Middle Eastern Studies 342 (Topic 5). Additional prerequisite: Upper-division standing.

**Topic 18: Jerusalem in Israeli Literature.** Same as Hebrew 346 (Topic 8: Jerusalem in Israeli Literature). Additional prerequisite: Upperdivision standing and Hebrew 412L.

**Topic 19: Postmodernist Israeli Literature.** Same as Middle Eastern Languages and Cultures 321 (Topic 7) and Middle Eastern Studies 342 (Topic 7). Study of the first decades of Israeli literature. Themes include the establishment of a new state in the aftermath of the Holocaust, conflict between Israel and Arab nations, and conflict between Israelis and Palestinians. Only one of the following may be counted: Comparative Literature 323 (Topic: Postmodernist Israeli Literature), English 322 (Topic: Postmodernist Israeli Literature), Jewish Studies 363 (Topic 19), Middle Eastern Languages and Cultures 321 (Topic 7), 342 (Topic 7). Additional prerequisite: Upperdivision standing.

**Topic 20: In Search of King David.** Same as Middle Eastern Languages and Cultures 321 (Topic 18), Middle Eastern Studies 342 (Topic 29), and Religious Studies 365 (Topic 3). Only one of the following may be counted: Jewish Studies 363 (Topic: In Search of King David), 363 (Topic 20), Middle Eastern Languages and Cultures 321 (Topic: In Search of King David), 321 (Topic 18), Middle Eastern Studies 342 (Topic: In Search of King David), 342 (Topic 29), Religious Studies 365 (Topic: In Search of King David), 365 (Topic 3). Prerequisite: Upperdivision standing.

**Topic 21: Introduction to the Music of the Middle East.** Same as Music 342 (Topic 7). Only one of the following may be counted: Islamic Studies 373 (Topic: Introduction to Music of the Middle East), Jewish Studies 363 (Topic: Introduction to Music of the Middle East), 363 (Topic 21), Middle Eastern Languages and Cultures 321 (Topic: Introduction to Music of the Middle East), Middle Eastern Studies 328 (Topic: Introduction to Music of the Middle East), 342 (Topic: Introduction to Music of the Middle East), Music 342 (Topic: Introduction to Music of the Middle East), 342 (Topic: Introduction to Music of the Middle East), 342 (Topic: Introduction to Music of the Middle East), 342 (Topic 7).

Topic 22: Comparative Jewish Literature: Israel, France, and the United States. Same as Middle Eastern Languages and Cultures 321 (Topic 38) and Middle Eastern Studies 342 (Topic 38). Only one of the following may be counted: Comparative Literature 323 (Topic: The Sacred and the Secular in Contemporary Jewish Literature), English 322 (Topic: The Sacred and the Secular in Contemporary Jewish Literature), Jewish Studies 363 (Topic 10), 363 (Topic 22), Middle Eastern Languages and Cultures 321 (Topic 8), 321 (Topic 38), Middle Eastern Studies 342 (Topic 8), 342 (Topic 38), Religious Studies 353 (Topic: The Sacred and the Secular in Contemporary Jewish Literature), 353 (Topic 3). Additional prerequisite: Upperdivision standing.

#### J S 364. Topics in History.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 1: Anti-Semitism in History and Literature. Same as

Comparative Literature 323 (Topic 42), European Studies 346 (Topic 29), and German, Scandinavian, and Dutch Studies 361L. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic: Anti-Semitism in History and Literature), 346 (Topic 29), Comparative Literature 323 (Topic: Anti-Semitism in History and Literature), 323 (Topic 42), German, Scandinavian, and Dutch Studies 360 (Topic: Anti-Semitism in History and Literature), 361L, Jewish Studies 361 (Topic: Anti-Semitism in History and Literature), 364 (Topic 1). Additional prerequisite: Upper-division standing.

#### Topic 2: The Jewish Experience in the Greco-Roman World. Prerequisite: Upper-division standing.

**Topic 3: The Bible and History.** Same as Religious Studies 354D. The critical uses of biblical and extrabiblical data in the reconstruction of the history of the biblical period. Three lecture hours a week for one semester. Only one of the following may be counted: Ancient History and Classical Civilization 330 (Topic: The Bible and History), Jewish Studies 364 (Topic 3), Religious Studies 354D. Additional prerequisite: Upper-division standing.

**Topic 4: The Dead Sea Scrolls.** Same as Ancient History and Classical Civilization 330 (Topic 1), History 364G (Topic 3), Middle Eastern Languages and Cultures 321 (Topic 17), Middle Eastern Studies 342 (Topic 23), and Religious Studies 353D. Three lecture hours a week for one semester. Only one of the following may be counted: Ancient History and Classical Civilization 330 (Topic: The Dead Sea Scrolls), 330 (Topic 1), History 364G (Topic 3), Jewish Studies 364 (Topic 4), Middle Eastern Languages and Cultures 321 (Topic 17), 342 (Topic 23), Religious Studies 353D. Additional prerequisite: Upper-division standing.

**Topic 5: The Spanish Inquisition.** Same as European Studies 346 (Topic 11), History 350L (Topic 77), and Religious Studies 357 (Topic 10). Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic: The Spanish Inquisition), 346 (Topic 11), History 350L (Topic: The Spanish Inquisition), 350L (Topic 77), Jewish Studies 364 (Topic: The Spanish Inquisition), 364 (Topic 5), Religious Studies 357 (Topic: The Spanish Inquisition), 357 (Topic 10).

**Topic 6: Introduction to the Holocaust.** Same as European Studies 346 (Topic 17), History 362G (Topic 3), and Russian, East European, and Eurasian Studies 335 (Topic 17). Examines the mass killing of Jews and other victims in the context of Nazi Germany's quest for race and space during World War II. Only one of the following may be counted: European Studies 346 (Topic: Introduction to the Holocaust), 346 (Topic 17), History 362G (Topic: Introduction to the Holocaust), 362G (Topic 3), Jewish Studies 364 (Topic: Introduction to the Holocaust), 364 (Topic 6), Middle Eastern Studies 325 (Topic: Introduction to the Holocaust), Russian, East European, and Eurasian Studies 335 (Topic: Introduction to the Holocaust), Russian, East European, and Eurasian Studies 335 (Topic: Introduction to the Holocaust), Russian, East European, and Eurasian Studies 335 (Topic: Introduction to the Holocaust), Russian, East European, and Eurasian Studies 335 (Topic: Introduction to the Holocaust), Russian, East European, and Eurasian Studies 335 (Topic: Introduction to the Holocaust), Russian, East European, and Eurasian Studies 335 (Topic: Introduction to the Holocaust), Russian, East European, and Eurasian Studies 335 (Topic: Introduction to the Holocaust), Russian, East European, and Eurasian Studies 335 (Topic: Introduction to the Holocaust), Russian, East European, Russia

**Topic 7: Jews of Eastern Europe.** Same as History 362G (Topic 8), Religious Studies 357 (Topic 13), and Russian, East European, and Eurasian Studies 335 (Topic 23). Explores the history and culture of Jews in Eastern Europe. Only one of the following may be counted: History 362G (Topic: Jews of Eastern Europe), 362G (Topic 8), Jewish Studies 364 (Topic: Jews of Eastern Europe), 364 (Topic 7), Religious Studies 357 (Topic: Jews of Eastern Europe), 357 (Topic 13), Russian, East European, and Eurasian Studies 335 (Topic: Jews of Eastern Europe), 335 (Topic 23).

**Topic 8: Southeast Europe in the Twentieth Century.** Same as European Studies 346 (Topic 18), History 362G (Topic 9), and Russian, East European, and Eurasian Studies 335 (Topic 18). Explores the key events and developments of Southeastern Europe, the region commonly referred to as the Balkans, in the twentieth century. Only one of the following may be counted: European Studies 346 (Topic: Southeast Europe in the Twentieth Century), 346 (Topic 18), History 362G (Topic: Southeast Europe in the Twentieth Century), 362G (Topic 9), Jewish Studies 364 (Topic: Southeast European, and Eurasian Studies 335 (Topic: Southeast Europe in the Twentieth Century), 335 (Topic 18).

Topic 9: Spinoza and Modernity. Same as Core Texts and Ideas 321F, European Studies 346 (Topic 21), History 362P, Philosophy 354 (Topic 7), and Religious Studies 357 (Topic 8). Introduction to the core of Spinoza's writings and the diverse reactions they have elicited. Examines Spinoza's refusal of mind-body dualism, as well as a transcendent god or ideal as a way of understanding Spinoza's concepts and ideas. Three lecture hours a week for one semester. Only one of the following may be counted: Core Texts and Ideas 335 (Topic: Spinoza and Modernity), 321F, European Studies 346 (Topic: Spinoza and Modernity), 346 (Topic 21), 347 (Topic: Spinoza and Modernity), History 362G (Topic: Spinoza and Modernity), 362P, Jewish Studies 364 (Topic: Spinoza and Modernity), 364 (Topic 9), Philosophy 334K (Topic: Spinoza and Modernity), 354 (Topic: Spinoza and Modernity), 354 (Topic 7), Religious Studies 357 (Topic: Spinoza and Modernity), 357 (Topic 8). Additional prerequisite: Upper-division standing.

Topic 10: The Church and the Jews. Same as European Studies 346 (Topic 28), History 362G (Topic 14), and Religious Studies 357 (Topic 9). Examination of the complex relationship between the Western Church and Jews over two millenia. Only one of the following may be counted: European Studies 346 (Topic: The Church and the Jews), 346 (Topic 28), History 362G (Topic: The Church and the Jews), 362G (Topic 14), Jewish Studies 364 (Topic: The Church and the Jews), 364 (Topic 10), Religious Studies 357 (Topic: The Church and the Jews), 357 (Topic 9). Additional prerequisite: Upper-division standing. Topic 11: World War II in Eastern Europe. Same as European Studies 346 (Topic 12), History 350L (Topic 79), and Russian, East European, and Eurasian Studies 335 (Topic 19). Examines the war in Eastern Europe with a particular emphasis on occupation, collaboration, and resistance; the Holocaust; and the connection between ethnic cleansing, population transfer, and the establishment of communism in postwar Eastern Europe. Only one of the following may be counted: European Studies 346 (Topic: World War II in Eastern Europe), 346 (Topic 12), History 350L (Topic: World War II in Eastern Europe), History 350L (Topic 79), Jewish Studies 364 (Topic: World War II in Eastern Europe), 364 (Topic 11), Russian, East European, and Eurasian Studies 335 (Topic: World War II in Eastern Europe), 335 (Topic 19).

#### J S 365. Topics in the Social Sciences.

Three lecture hours a week for one semester; additional hours may be required for some topics. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: America and the Holocaust.** Same as American Studies 321 (Topic 4) and History 356R. Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 321 (Topic 4), 370 (Topic: America and the Holocaust), History 350L (Topic: America and the Holocaust), 356R, 365G (Topic: America and the Holocaust), Jewish Studies 361 (Topic: America and the

Holocaust), 365 (Topic 1), Liberal Arts Honors 350 (Topic: America and the Holocaust). Additional prerequisite: Upper-division standing. **Topic 4: Jewish Immigrant Culture in America.** Prerequisite: Upper-division standing.

Topic 5: Jewish Ethics. Prerequisite: Upper-division standing. Topic 7: Rome and Jerusalem. Same as Ancient History and Classical Civilization 325 (Topic 3), History 321G, Middle Eastern Studies 342 (Topic 21), and Religious Studies 365 (Topic 1). A study of daily life in Israel during the Roman period, focusing on Jerusalem, ancient Palestinian synagogues and churches, Jewish and Christian symbolism, agriculture, warfare, and burial practices. Three lecture hours a week for one semester. Only one of the following may be counted: Ancient History and Classical Civilization 325 (Topic 3), Classical Civilization 348 (Topic: Rome and Jerusalem), History 321G, Jewish Studies 365 (Topic 7), Middle Eastern Studies 342 (Topic 21), Religious Studies 365 (Topic 1), Urban Studies 353 (Topic: Rome and Jerusalem). Additional prerequisite: Upper-division standing. Topic 10: Israel: Society and Politics. Same as Government 365N (Topic 16). Analysis of Israeli politics and society in a comparative perspective with a major focus on the social and political cleavages in Israel. Only one of the following may be counted: Government 365N (Topic: Israel: Society and Politics), 365N (Topic 16), Jewish Studies 361 (Topic: Israel: Society and Politics), 365 (Topic: Israel: Society and

Politics), 365 (Topic 10). **Topic 11: Representation of Jews in the American Public Sphere.** Same as Anthropology 325L (Topic 13) and Religious Studies 346 (Topic 8). Examines how Jews have been represented and constituted in American public culture as a race, religion, and/or nation through distinct institutions and display practices. Only one of the following may be counted: Anthropology 325L (Topic: Representation of Jews in the American Public Sphere), 325L (Topic 13), Jewish Studies 365 (Topic: Representation of Jews in the American Public Sphere), 365 (Topic 11), Religious Studies 346 (Topic: Representation of Jews in the American Public Sphere), 346 (Topic 8).

**Topic 12: American Jewish Material Culture.** Same as Anthropology 325L (Topic 17) and Religious Studies 346 (Topic 9). Examines the interplay between material culture and Jewish identity and thought in contemporary America. Only one of the following may be counted: Anthropology 325L (Topic: American Jewish Material Culture), 325L (Topic 17), Jewish Studies 365 (Topic: American Jewish Material Culture), 365 (Topic 12), Religious Studies 346 (Topic: American Jewish Material Culture), 346 (Topic 9).

**Topic 13: Anti-Semitism.** Same as History 366N (Topic 15) and Sociology 321S. Surveys trends in Judeophobia/anti-Semitism over 2,500 years in both Christian and non-Christian societies. Designed to use anti-Semitism as way to explore more general ideas in social theory such as boundary making; models of racial, ethnic, and cultural conflict; and the role of intellectual and scientific elites. Three lecture hours a week for one semester. Only one of the following may be counted: History 366N (Topic: Anti-Semitism), 366N (Topic 15), Jewish Studies 365 (Topic: Anti-Semitism), 365 (Topic 13), Sociology 321K (Topic: Anti-Semitism), 321S. Additional prerequisite: Upper-division standing.

**Topic 14: Holocaust Aftereffects.** Same as Comparative Literature 323 (Topic 40), European Studies 346 (Topic 23), German, Scandinavian, and Dutch Studies 360 (Topic 1), Religious Studies 357 (Topic 18), and Women's and Gender Studies 340 (Topic 66). Explores the historical, political, psychological, theological, and cultural fallout of the Holocaust, as well as literary and cinematic responses in Europe and the United States. Only one of the following may be counted: Comparative Literature 323 (Topic: Holocaust Aftereffects), 323 (Topic 40), European Studies 346 (Topic: Holocaust Aftereffects), 346 (Topic 23), German, Scandinavian, and Dutch Studies 360 (Topic 1), Germanic Civilization 323E (Topic: Holocaust Aftereffects), Jewish Studies 365 (Topic: Holocaust Aftereffects), 365 (Topic 14), Liberal Arts Honors

350 (Topic: Holocaust Aftereffects), Religious Studies 357 (Topic: Holocaust Aftereffects), 357 (Topic 18), Women's and Gender Studies 340 (Topic: Holocaust Aftereffects), 340 (Topic 66).

#### J S 375. Senior Seminar.

Intensive study and research on selected topics in Jewish studies, with on-going, in-class presentations for critique by fellow students and the instructor. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and consent of the Jewish studies adviser.

#### J S 679H. Honors Tutorial Course.

Restricted to Jewish studies majors. Supervised individual reading and research for one semester, followed by writing a substantial honors thesis during the second semester. Conference course for two semesters. Prerequisite: For 679HA, admission to the Jewish Studies Honors Program; for 679HB, Jewish Studies 679HA.

# Teresa Lozano Long Institute of Latin American Studies

### Indigenous Languages of Latin America: LAL

### **Lower-Division Courses**

#### LAL 601C. Intensive Indigenous Language of Latin America I.

Introduction to an indigenous language of Latin America. Designed to provide students with the basics of grammar and vocabulary; the to ability to engage in simple, colloquial conversation; and basic writing skills as foundation for further study. The equivalent of six lecture hours a week for one semester. May be repeated for credit when the topics vary.

# LAL 611C. Intensive Indigenous Language of Latin America II.

Continuation in the study of an indigenous language of Latin America. Designed to introduce students to advanced subjects in grammar and vocabulary and develop advanced conversation, reading, and writing skills as a foundation for further study. The equivalent of six lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Indigenous Languages of Latin America 601C with a grade of at least C.

### **Upper-Division Courses**

#### LAL 321. Third-Year Indigenous Language of Latin America I.

Advanced study of an indigenous language of Latin America, with an emphasis on advanced conversation and reading skills. Particular attention is given to cultural issues and discussion in the target language. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Indigenous Languages of Latin America 611C with a grade of at least C.

#### LAL 322. Third-Year Indigenous Language II.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Indigenous Languages of Latin America 321.

#### LAL 330. Topics in Language, Culture, and Linguistics.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Indigenous Languages of Latin America 611C.

### Latin American Studies: LAS

### **Lower-Division Courses**

#### LAS 301. Key Ideas and Issues in Latin America.

Same as History 306N (Topic 3: Key Ideas and Issues in Latin America). Broad introductory course to acquaint students with the main areas of interest in Latin American studies. Three lecture hours a week for one semester.

#### LAS 310. General Topics in Latin American Studies.

Topics that serve as an introduction to Latin America within the framework of different disciplines. Three lecture hours or two lecture hours and one discussion hour a week for one semester. May be repeated for credit when the topics vary.

**Topic 1: Latin American Civilization: The Colonial Experience.** Same as History 310K. A broad survey of the political, economic, social, and cultural aspects of the Latin American past, stressing both that area's achievements and its enduring problems. Only one of the following may be counted: History 310K, 346K, Latin American Studies 310 (Topic 1), 366 (Topic 2: Latin America before 1810).

**Topic 2: Latin American Civilization: The National Experience.** Same as History 310L. A broad survey of the political, social, and cultural aspects of the Latin American past. Only one of the following may be counted: History 310L, 346L, Latin American Studies 310 (Topic 2), 366 (Topic 3: Latin America since 1810).

**Topic 5: Film and History in Latin America: Colonial Period.** Same as History 310M. Introduction to selected subjects in Latin American history and culture through film, readings, documentaries, class discussion, and lectures. Three lecture hours a week for one semester. Only one of the following may be counted: History 306N (Topic: Film History in Latin America: Colonial), 310M, Latin American Studies 310 (Topic: Film History in Latin America: Colonial), Latin American Studies 310 (Topic 5).

Topic 6: Film and History in Latin America: Modern Period. Same as History 310N. Introduction to selected subjects in Latin American history and culture through film, readings, documentaries, class discussion, and lectures. Three lecture hours a week for one semester. Only one of the following may be counted: History 306N (Topic: Film History in Latin America: Modern), 310N, Latin American Studies 310 (Topic: Film History in Latin America: Modern), 310 (Topic 6). Topic 7: Liberation in the African Diaspora. Same as African and African Diaspora Studies 317E (Topic 3). Examination of liberation and freedom struggles in the African diaspora, focusing on common intellectual, political, and social currents among the diaspora's various groups. Course focuses on three major themes: abolitionism, Pan-Africanism and national liberation, and hip hop. Particular emphasis will be on the ideas associated with these movements, and the major organizations and intellectual currents in all three. Only one of the following may be counted: African and African Diaspora Studies 317E (Topic: Liberation in the African Diaspora), 317E (Topic 3), Latin American Studies 310 (Topic: Liberation in the African Diaspora), 310 (Topic 7).

# LAS 315. Introductory Topics in Latin American Social Sciences.

Three lecture hours or two lecture hours and one discussion hour a week for one semester. Latin American Studies 310 and 315 may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Anthropology of Latin America.** Same as Anthropology 310L (Topic 3). Provides a framework for understanding contemporary concerns in Latin America. Only one of the following may be counted:

Anthropology 310L (Topic 3), Latin American Studies 310 (Topic 4), 315 (Topic 1).

**Topic 2: Introduction to Mesoamerican Archaeology.** Same as Anthropology 314C. Introduction to ancient Mesoamerica from the time of emerging social inequality in the formative period until the Spanish conquest of Mexico-Tenochtitlan in the sixteenth century. Only one of the following may be counted: Anthropology 310L (Topic 1: Introduction to Mesoamerican Archaeology), 314C, Latin American Studies 310 (Topic 3: Introduction to Mesoamerican Archaeology), 315 (Topic 2).

#### LAS 319. Geography of Latin America.

Same as Geography 319. Adaptations to population growth and spatial integration in cultural landscapes of great natural and ethnic diversity; problems of frontiers and cities. Three lecture hours a week for one semester.

#### LAS 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Latin American Studies.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in Latin American studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### LAS 322. Topics in Latin American Studies.

Topics vary each semester to allow curriculum flexibility for faculty members and visiting scholars. Three lecture hours a week for one semester. Additional hours are required for some topics. Latin American Studies 322 and 330 may not both be counted unless the topics vary; Latin American Studies 322 and 370P may not both be counted unless the topics vary; Latin American Studies 322 and 370S may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 9: Business in Emerging Markets. Same as International Business 373 and Middle Eastern Studies 341 (Topic 2). Only one of the following may be counted: International Business 372 (Topic 2), 373, Latin American Studies 322 (Topic 9), Middle Eastern Studies 341 (Topic 2). Additional prerequisite: Upper-division standing. Topic 10: Minorities and the Media. Issues concerning minority or nondominant groups within the United States. Survey of minority communication problems: alienation, fragmentation, media and Internet access; criticism and feedback for minority groups based on racial/ethnic background, age, sex, disability, social or economic class, and sexual orientation. Only one of the following may be counted: Journalism 341J, Latin American Studies 322 (Topic 10: Minorities and the Media), Mexican American Studies 374 (Topic 22: Minorities and the Media), Urban Studies 354 (Topic: Minorities and the Media), Women's and Gender Studies 340 (Topic 21). Additional prerequisite: Upper-division standing.

Topic 11: Narrative Journalism. Three lecture hours and three laboratory hours a week for one semester. Only one of the following may be counted: Journalism 335, Latin American Studies 322 (Topic 11: Latino Community Journalism), 322 (Topic 11: Narrative Journalism), Mexican American Studies 374 (Topic 4: Latino Community Journalism), 374 (Topic 4: Narrative Journalism). Prerequisite: Upper-division standing and consent of instructor. Topic 13: Latin American Theatre and Drama. Same as Theatre and Dance 357T (Topic 1: Latin American Theatre and Drama). Prerequisite: Upper-division standing and consent of instructor. **Topic 15: Indigenous Languages of the Americas.** Same as Linguistics 350 (Topic 6: Indigenous Languages of the Americas). Examines various aspects of languages in the Americas, including their linguistic structures, the cultural domains in which they exist, and their histories of language contact and change. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

**Topic 16: Business in Brazilian Life and Culture.** Same as Portuguese 367P (Topic 1). Cultural aspects of business practices in Brazil. Only one of the following may be counted: Latin American Studies 322 (Topic 16), 370P (Topic: Cultural Aspects of Doing Business in Brazil), Portuguese 367P (Topic 1), Portuguese Civilization 320E (Topic: Cultural Aspects of Doing Business in Brazil). Additional prerequisite: Portuguese 327C or 362, and 330L.

**Topic 17: Spanish for Health Care Professions.** Same as Spanish 367P (Topic 1). Designed to exercise fluency in both spoken and written language in health care situations. Focus on the complex grammatical concepts and cultural issues that affect professional activities in Spanish-speaking communities. Only one of the following may be counted: Latin American Studies 322 (Topic 17), Spanish 367K (Topic 7), 367P (Topic 1). Additional prerequisite: Spanish 327C (or 327G), 328C, and 330L.

**Topic 18: Business in Hispanic Life and Culture.** Same as Spanish 367P (Topic 2). Only one of the following may be counted: Latin American Studies 322 (Topic 18), 370S (Topic 19), Spanish 350 (Topic 10), Spanish 367P (Topic 2). Prerequisite: Spanish 327C (or 327G) and 328C.

Topic 19: Afro-Caribbean Diasporas. Same as African and African Diaspora Studies 374E (Topic 6). Analysis of the socio-cultural contexts of the African diaspora in the Americas, with a specific focus on the African diaspora in the islands of the Caribbean. Designed to analyze the cultural, social, and philosophical contributions of these diasporic populations and the ways they build social and cultural agency in their specific national or diasporic contexts. Only one of the following may be counted: African and African Diaspora Studies 374E (Topic: Afro-Caribbean Diasporas), 374E (Topic 6), Latin American Studies 322 (Topic 19), 370S (Topic: Afro-Caribbean Diasporas). Topic 20: Journalism and Press Freedom in Latin America. Same as Journalism 354F. Focus on journalism in Latin America with an emphasis on the struggle for democracy and press freedom in the region through country-by-country survey of historical, political, economic, cultural, ethnic and geographical aspects. Examination of the evolution of professional journalism in Latin America, including topics such as the legal framework for freedom of expression, ethical principles, concentration of media ownership and the emergence of digital media. Knowledge of Spanish language is recommended, but it is not a requirement. Three lecture hours a week for one semester. Only one of the following may be counted: Journalism 354F. 367E. Latin American Studies 322 (Topic 14), 322 (Topic 20).

**Topic 21: Measuring Racial Inequality.** Same as African and African Diaspora Studies 350. Analysis of racial inequality through social statistics. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 350, 372F (Topic: Measuring Racial Inequality), Latin American Studies 322 (Topic: Measuring Racial Inequality), 322 (Topic 21). Additional prerequisite: Upper-division standing.

#### LAS 324L. Topics in Latin American Anthropology.

Topics vary each semester to allow curriculum flexibility for faculty members and visiting scholars. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 10: The Civilization of the Maya.** Same as Anthropology 360K. Maya prehistory and history: the archaeological record, codices and inscriptions, and Spanish conquest writings. Prerequisite: Upperdivision standing.

Topic 13: Colonial Latin American Archaeology. Same as Anthropology 327D. Focuses on the Spanish colonies in Latin America. Three lecture hours a week for one semester. Anthropology 327D and Latin American Studies 324L (Topic 13) may not both be counted. Topic 14: The Politics of Race and Violence in Brazil. Same as Anthropology 324L (Topic 37: The Politics of Race and Violence in Brazil) and African and African Diaspora Studies 374E (Topic 2: The Politics of Race and Violence in Brazil). Prerequisite: Upper-division standing.

**Topic 15: Global Indigenous Issues.** Same as Anthropology 324L (Topic 53). Explores contemporary issues of indigenous peoples around the world through films, literature, and social science readings and focuses on how indigenous peoples are actively working to oppose their oppression and create sustainable futures. Only one of the following may be counted: Anthropology 324L (Topic: Global Indigenous Issues), 324L (Topic 53), Latin American Studies 324L (Topic: Global Indigenous Issues) 324L (Topic 15).

**Topic 16: Mexican Immigration Cultural History.** Same as Anthropology 322M (Topic 12). Examines the history of Mexican immigration to the United States, and provides an overview of migratory patterns dating back to the late prehistoric period through contemporary times. Only one of the following may be counted: Anthropology 310L (Topic: Mexican Immigration Cultural History), 322M (Topic 12), Latin American Studies 310 (Topic: Mexican Immigration Cultural History), 324L (Topic 16), Mexican American Studies 319 (Topic: Mexican Immigration Cultural History).

Topic 17: Black Women and the State. Same as African and African Diaspora Studies 372F (Topic 12), Anthropology 324L (Topic 78), and Women's and Gender Studies 340 (Topic 7). Surveys black women's experiences living with and confronting state oppression around the world. Takes an historical, social, and theoretical look at the roots of this oppression and inequality, and how black women have chosen to respond to it locally and globally. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 372F (Topic: Black Women, Struggle, and the Transnational State), 372F (Topic 11), 372F (Topic 12), Anthropology 324L (Topic: Black Women, Struggle, and the Transnational State), 324L (Topic 78), Latin American Studies 324L (Topic: Black Women, Struggle, and the Transnational State), 324L (Topic 17), Women's and Gender Studies 340 (Topic: Black Women, Struggle, and the Transnational State), 340 (Topic 7), 340 (Topic 63). Additional prerequisite: Upper-division standing.

**Topic 18: Inca World.** Same as Anthropology 324L (Topic 74). Explores how Inca civilization developed, how the Incas grew from a small highland state into a mighty empire, and how a small number of Spaniards and their allies were able to bring the Inca dynasty to an end. Read accounts of the Incas written in the first years of Spanish colonial rule, and review the latest archaeological discoveries. Only one of the following may be counted: Anthropology 324L (Topic: Inca World), 324L (Topic 74), Latin American Studies 324L (Topic: Inca World), 324L (Topic 18). Additional prerequisite: Upper-division standing.

#### LAS 325. Topics in Latin American Sociology.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Society of Modern Mexico.** Same as Sociology 335 and Urban Studies 354 (Topic 2: Society of Modern Mexico). Family, community, industrialization, and urbanization in modern Mexico.

Topic 2: Social Change in Developing Nations. Overview of changing social structure in the Third World. Latin American Studies 325 (Topic

2) and Sociology 324K may not both be counted. Prerequisite: Upperdivision standing.

**Topic 4: Politics and Society in Latin America.** Same as Sociology 321P. Introduction to present-day Latin American politics and society with a focus on drug-trafficking and urban destitution in Brazil; party politics, protest, and collective violence in Argentina; the current political situation in Venezuela; and migration from Central America and the Caribbean to the United States. Also includes a general overview of revolutions and revolutionary movements in Latin America, and the effects of United States intervention in the region during the twentieth century. Three lecture hours a week for one semester. Only one of the following may be counted: Latin American Studies 325 (Topic: Politics and Society in Latin America), Latin American Studies 325 (Topic 4), Sociology 321F. Additional prerequisite: Upper-division standing.

**Topic 5: Consumption in Latin America.** Same as Sociology 321C. Study of the role consumption plays in social, economic, and political relations in Latin America, as well as contesting ideas about this role. Three lecture hours a week for one semester. Only one of the following may be counted: Latin American Studies 325 (Topic: Consumption in Latin America), Latin American Studies 325 (Topic 5), Sociology 321C, Sociology 321K (Topic: Consumption in Latin America). Additional prerequisite: Upper-division standing.

#### LAS 326. Topics in Latin American Music.

Three lecture hours a week for one semester, with one laboratory hour a week if required. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Music of Mexico and the Caribbean.** Same as African and African Diaspora Studies 374F (Topic 22) and Music 334 (Topic 1). Introduction to the history of Mexican and Caribbean traditional and commercial music, with some discussion of classical music as well. Attention will be given to music of indigenous, African, European, and mixed origin. Mexico and the Spanish-speaking Caribbean receive special attention. Class meetings will be divided into lecture/ discussion segments, videos, listening, and performance instruction/ demonstration. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Music of Mexico and the Caribbean), 374F (Topic 22), Latin American Studies 322 (Topic: Music of Mexico and the Caribbean), 326 (Topic 1), Music 334 (Topic 1). Prerequisite: Upper-division standing.

**Topic 2: Music of Latin America.** Same as Music 334 (Topic 2). Only one of the following may be counted: Latin American Studies 322 (Topic: Music of Latin America), 326 (Topic 2), Music 334 (Topic 2). **Topic 3: Music of Brazil and Argentina.** Same as Music 334 (Topic 3). An introduction to Brazilian and Argentine music from samba, capoeira, and forro to tango, cumbia villera, and chacarera; examines such music making within its various historical, social, and political contexts. Uses course readings, lectures, listening assignments, performance attendance, and movie screenings to analyze themes including nationalism and ethnicity, globalization and development, and democracy and social justice. Only one of the following may be counted: Latin American Studies 322 (Topic: Music of Brazil and Argentina), 326 (Topic 3), Music 334 (Topic 3). Prerequisite: Upper-division standing.

**Topic 4: Music of the Andean Countries.** Same as Music 334 (Topic 4). Introduction to the music of Andean countries including Colombia, Ecuador, Peru, Bolivia, and Chile. Explores the role music plays in shaping historical and modern Andean societies, as well as how music comments upon national culture, society, and politics, with particular attention to the ways in which musicians and musical movements continue to influence Andean societies. Subjects include pre-Columbian and colonial music making; music representative

of the tripartite indigenous, African, and Iberian heritage of Andean countries; aesthetics, identity, and musical expression; ritual, religion, and the politics of musical performance. Only one of the following may be counted: Latin American Studies 322 (Topic: Music of the Andean Countries), 326 (Topic 4), Music 334 (Topic 4). Topic 5: The Music of the African Diaspora. Same as African and African Diaspora Studies 374F (Topic 8) and Music 334 (Topic 5). The musical legacy of the African slave trade in the Americas, the social contexts in which black musical forms have developed, and their varied forms. Subjects include the shifting meanings of "black music" in various contexts: the notion of hybridity: the uses of African influenced music as a political or oppositional tool; and African ethnic groups represented prominently in the New World, the traditions they brought with them, and the ways they have been adapted to new ends. Three lecture hours and one laboratory hour a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Music of the African Diaspora), 374F (Topic 8), Latin American Studies 326 (Topic: Music of the African Diaspora), 326 (Topic 5), Music 334 (Topic: Music of the African Diaspora), 334 (Topic 5).

#### LAS 327. Topics in Latin American Art History.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Chicano Art Histories and Futures.** Same as Art History 341L. Mexican American art since the 1960s, with an emphasis on the visual production and exhibition of identity inside and outside the Chicano civil rights movement and the politics of U.S. multiculturalism. An introduction to a broad range of art history written to date--including recent feminist and queer interventions--as a means of envisioning a supposed "post-Chicano" or "post-racial" moment. Three lecture hours a week for one semester. Art History 341L and Latin American Studies 327 (Topic 1) may not both be counted.

**Topic 2: Modern Art of Mexico.** Same as Art History 341K. Mexican visual culture from the late nineteenth century through 1968. Emphasis on the emergence of modernist avant-gardes and popular entertainment, and their ambivalent relationship to state, church, and market. Also explores how self-consciously negotiating the tension between native and international influences, artists, critics, and curators contributes to notions of Lo Mexicano, or "Mexicanness." Three lecture hours a week for one semester. Art History 341K and Latin American Studies 327 (Topic 2) may not both be counted. **Topic 3: Mesoamerican Art and Culture.** Same as Art History 347L. Mesoamerican art, architecture, and its archaeological context, with emphasis on the social function of art and visual culture in ancient Mesoamerica up to the time of European contact. Three lecture hours a week for one semester. Art History 347L and Latin American Studies 327 (Topic 3) may not both be counted.

**Topic 5: Maya Art and Architecture.** Same as Art History 347M. Introduction to the artistic traditions of the ancient Maya, tracing their development up to the time of European contact. Students will examine various important themes of Maya culture including history, ritual, and cosmology as revealed in sculpture, hieroglyphs, painting, and architectural design. Three lecture hours a week for one semester. Art History 347M and Latin American Studies 327 (Topic 5) may not both be counted.

**Topic 6: Art and Archaeology of Ancient Peru.** Same as Art History 347K. The growth of civilization in South America from the earliest decorated textiles, pottery, and ceremonial buildings to the imperial Inca style. Three lecture hours a week for one semester. Art History 347K and Latin American Studies 327 (Topic 6) may not both be counted.

# LAS 328. Topics in Latin American Arts, Literature, Film, and Dance.

Three lecture hours a week for one semester; some topics may require additional hours. Latin American Studies 322 and 328 may not both be counted unless the topics vary. Latin American Studies 328 and 370P may not both be counted unless the topics vary. Latin American Studies 328 and 370S may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Varies with topic.

**Topic 1: Samba to Hip Hop: Brazilian Popular Music.** Same as Portuguese Civilization 320E (Topic 1). Examines the role of popular music in relationships of power with subordination and the impact of music as a form of cultural expression.

**Topic 2: Global Brazil: Immigration and Diaspora in Brazilian Culture.** Same as Portuguese Civilization 320E (Topic 2). Examination of twentieth-century literature, films, and other cultural artifacts that capture the multicultural reality of Brazilian society and challenge the image of Brazil as a unified, harmonious, racially-mixed nation. Subjects include contemporary textual and visual representations of the Brazilian diaspora in the United States and Europe. Only one of the following may be counted: Latin American Studies 328 (Topic 2), 370P (Topic 6), Portuguese Civilization 320E (Topic 2), Portuguese 375 (Topic 7).

**Topic 3: Afro-Luso-Brazilian Worlds.** Same as African and African Diaspora Studies 372G (Topic 8) and Portuguese Civilization 320E (Topic 3). Study of the myths and realities in the Afro-Luso-Brazilian worlds and the connections and contrasts between them. Only one of the following may be counted: African and African Diaspora Studies 372E (Topic: Afro-Luso-Brazilian Worlds), 374E (Topic: Afro-Luso-Brazilian Worlds), 374E (Topic: Afro-Luso-Brazilian Worlds), 374E (Topic: Afro-Luso-Brazilian Worlds), Latin American Studies 328 (Topic 3), 370P (Topic: Afro-Luso-Brazilian Worlds), Portuguese Civilization 320E (Topic: Afro-Luso-Brazilian Worlds), 320E (Topic 3).

**Topic 4: Jewish Voices from Latin America.** Same as Jewish Studies 363 (Topic 15) and Spanish Civilization 320C (Topic 1). An introduction to Jewish writers from Brazil and Latin America, with an emphasis on those whose works portray the situation of the Jewish communities in their respective cities and countries. Only one of the following may be counted: Jewish Studies 363 (Topic: Latin American Jewish Writers), 363 (Topic 15), Latin American Studies 328 (Topic 4), 370S (Topic: Latin American Jewish Writers), 370S (Topic 32), Spanish 352 (Topic), 355 (Topic 3), Spanish Civilization 320C (Topic 1). Additional prerequisite: Upper-division standing.

**Topic 5: Mediascapes: Literature and Media in the Caribbean.** Same as Spanish Civilization 320C (Topic 2). Analyzes the relationship between literature and media technologies in contemporary Caribbean cultures. Only one of the following may be counted: Latin American Studies 328 (Topic 5), 370S (Topic 28), Spanish Civilization 320C (Topic 2), Spanish 350K (Topic 5).

#### LAS 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Latin American Studies.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in Latin American studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### LAS 330. Topics in Latin American Geography.

Three lecture hours a week for one semester. Latin American Studies 322 and 330 may not both be counted unless the topics vary. May be

repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 2: Landscapes of Mexico and Caribbean America.** Same as Geography 341K. The natural regions and cultural landscapes of Mexico, Central America, and the West Indies. Prerequisite: Upperdivision standing.

**Topic 3: South America: Nature, Society and Sustainability.** Same as Geography 323K. Field study of environmental and social change in selected landscapes in South America, such as protected areas; places of food production; transportation routes; migrant landscapes; urban areas; sites of cultural and historical importance; and issues of human rights. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

Topic 4: Mapping Latin America. Same as Geography 356T (Topic 12) and History 363K (Topic 4). Discuss the role of maps in the creation of Latin America as a specific sort of place. As such, allows familiarity with a broad overview of Latin American history from Pre-Columbian civilizations to the modern period. Only one of the following may be counted: Geography 356T (Topic: Mapping Latin America), 356T (Topic 12), History 363K (Topic: Mapping Latin America), 363K (Topic 4), Latin American Studies 330 (Topic: Mapping Latin America), 330 (Topic 4). Additional prerequisite: Upper-division standing. Topic 5: Vulnerability to Natural Hazards. Same as Geography 334L. An interdisciplinary approach, set right at the nexus of both physical and human geography, to studying the types of natural disasters that occur throughout Earth with a focus on tropical areas. Explore a region's susceptibility to natural disasters by studying the physical phenomena that incite specific hazards so that their spatial distribution can be outlined. Utilize theoretical frameworks that can expose the social causes of human vulnerability, the political repercussions of disasters, and how disaster response varies from country to country depending on varying political stances and economic conditions. Three lecture hours a week for one semester. Only one of the following may be counted: Geography 334C, 334L, Latin American Studies 330 (Topic: Environment Hazards Latin America/Caribbean), 330 (Topic 5). Additional prerequisite: Upperdivision standing.

#### LAS 337M. Topics in Latin American Politics.

Topics vary each semester to allow curriculum flexibility for faculty members and visiting scholars. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 2: Parties, Elections, and Democracy in Latin America.** Same as Government 337M (Topic 2). Only one of the following may be counted: Government 337M (Topic: Politics of Development in Latin America), 337M (Topic 2), 337M (Topic 16), Latin American Studies 337M (Topic: Politics of Development in Latin America), 337M (Topic 2), 337M (Topic 16). Additional prerequisite: Six semester hours of lower-division coursework in government.

**Topic 3: Politics in South America.** Same as Government 337M (Topic 3: Politics in South America). Prerequisite: Six semester hours of lower-division coursework in government.

**Topic 5: Introduction to Latin American Government and Politics.** Same as Government 328L. An introductory survey of Latin American political systems: governmental organization, political processes, and current problems. Prerequisite: Six semester hours of lower-division coursework in government.

**Topic 6: Political Development in Eastern Europe and Latin America.** Same as Government 365N (Topic 4). Government 365N (Topic 4) and Latin American Studies 337M (Topic 6) may not both be counted. Additional prerequisite: Six semester hours of lower-division coursework in government. **Topic 8: Latino Politics.** Same as Mexican American Studies 374 (Topic 15: Latino Politics) and Government 370K (Topic 2: Latino Politics). Prerequisite: Six semester hours of lower-division coursework in government.

**Topic 9: The Military in Politics.** Only one of the following may be counted: Government 365N (Topic 3: The Military in Politics); Latin American Studies 337M (Topic 9); Russian, East European, and Eurasian Studies 335 (Topic 10: The Military in Politics). Prerequisite: Six semester hours of lower-division coursework in government.

**Topic 10: Political Transition in Europe and Latin America.** Same as Government 365N (Topic 11: Political Transition in Europe and Latin America). Only one of the following may be counted: Government 365N (Topic 11), Latin American Studies 337M (Topic 10). Additional prerequisite: Six semester hours of lower-division coursework in government.

**Topic 11: Politics of Mexico.** Same as Government 337M (Topic 6). Survey of twentieth century politics in Mexico with an emphasis on political and economic development. Only one of the following may be counted: Government 337M (Topic: Politics of Mexico), 337M (Topic 6), Latin American Studies 337M (Topic: Politics of Mexico), 337M (Topic 11).

**Topic 12: Law and Democracy in Latin America.** Same as Government 337M (Topic 7). Explores many of the challenges to the rule of law across Latin America and how they affect the quality of democracy in the region. Only one of the following may be counted: Government 337M (Topic: Law and Democracy in Latin America), 337M (Topic 7), Latin American Studies 337M (Topic: Law and Democracy in Latin America), 337M (Topic 12).

**Topic 13: International Politics of Latin America.** Same as Government 337M (Topic 8). Analysis of Latin America's political and economic relations with respect to external actors since the late twentieth century. Only one of the following may be counted: Government 337M (Topic: International Politics of Latin America), 337M (Topic 8), Latin American Studies 337M (Topic: International Politics of Latin America), 337M (Topic 13).

**Topic 14: Politics, Economy, and Society of Contemporary Brazil.** Same as Government 337M (Topic 9). An introduction to Brazil with a focus on domestic politics; economic development and management; social relations and social policy issues; and foreign policy. Only one of the following may be counted: Government 337M (Topic: Politics, Economy, and Society of Contemporary Brazil), 337M (Topic 9), Latin American Studies 337M (Topic: Politics, Economy, and Society of Contemporary Brazil), 337M (Topic 14).

**Topic 15: Politics of New Democracies.** Same as Government 365N (Topic 13) and Russian, East European, and Eurasian Studies 335 (Topic 22). Examination of the process of democratization and factors related to its success. Only one of the following may be counted: Government 365N (Topic 13), Latin American Studies 337M (Topic: Politics of New Democracies), 337M (Topic 15), Russian, East European, and Eurasian Studies 335 (Topic: Politics of New Democracies), 335 (Topic 22). Additional prerequisite: For government majors, six semester hours of lower-division coursework in government; for others, upper-division standing.

**Topic 16: Politics of Development in Latin America.** Same as Government 337M (Topic 16). Examines the struggle for development in Latin America during the last century. Only one of the following may be counted: Government 337M (Topic: Politics of Development in Latin America), 337M (Topic 2), 337M (Topic 16), Latin American Studies 337M (Topic: Politics of Development in Latin America), 337M (Topic 2), 337M (Topic 16). Additional prerequisite: Six semester hours of lower-division coursework in government.

# LAS 337N. Afro-Caribbean Politics and Culture in Central America.

Same as African and African Diaspora Studies 326, Anthropology 324L (Topic 47), and Women's and Gender Studies 340 (Topic 38). Exploration of black identity, political systems, and community activism in Central America and the Caribbean. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 326, 374E (Topic: Afro-Caribbean Politics and Culture in Central America), Anthropology 324L (Topic: Afro-Caribbean Politics and Culture in Central America), 324L (Topic: 47), Government 365N (Topic: Afro-Caribbean Politics and Culture in Central America), A37N (Topic: Afro-Caribbean Politics and Culture in Central America), 337N, Women's and Gender Studies 340 (Topic: Afro-Caribbean Politics and Culture in Central America), 340 (Topic: 38). Prerequisite: Upper-division standing.

#### LAS 355. Topics in Latin American Economics.

Topics vary each semester to allow curriculum flexibility for faculty members and visiting scholars. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Development Problems and Policies in Latin America.** Same as Economics 355 and Urban Studies 351 (Topic 1). Analysis of the economies of Latin America. Issues may include the structure and functioning of cities, rural-urban migration, the sectoral composition of GDP and employment, and determinants of growth. Additional prerequisite: Economics 304K and 304L with a grade of at least C- in each.

#### LAS 359H. Honors Seminar.

An interdisciplinary discussion and writing seminar. Lectures and supervised individual research and writing of a substantial paper on a special topic. Three lecture hours a week for one semester. May be repeated for credit. Prerequisite: Upper-division standing, and consent of instructor and the Latin American studies honors adviser.

#### LAS 366. Topics in Latin American History.

Topics vary each semester to allow curriculum flexibility for faculty members and visiting scholars. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 2: Colonial Latin America.** Same as History 346K. Basic survey course, designed as an introduction to Latin American history in the colonial period. Only one of the following may be counted: History 310K, 346K, Latin American Studies 310 (Topic 1: Latin American Civilization: The Colonial Experience), 366 (Topic 2). Prerequisite: Upper-division standing.

**Topic 3: Modern Latin America.** Same as History 346L. Continuation of History 346K and Latin American Studies 366 (Topic 2). Only one of the following may be counted: African and African Diaspora Studies 374E (Topic: Modern Latin America), 374E (Topic 5), History 310L, 346L, Latin American Studies 310 (Topic 2: Latin American Civilization: The National Experience), 366 (Topic 3). Additional prerequisite: Upper-division standing.

Topic 7: Resistance, Rebellion, and Revolution in Colonial Spanish America. Same as History 350L (Topic 19: Resistance, Rebellion, and Revolution in Colonial Spanish America). Only one of the following may be counted: History 350L (Topic 19), Latin American Studies 366 (Topic: Resistance, Rebellion, and Revolution in Colonial Spanish America), 366 (Topic 7). Prerequisite: Upper-division standing. **Topic 8: The Mexican Revolution, 1910-1920.** Same as History 352L. An analytical examination of the initial decade of the Mexican Revolution, the first of the twentieth-century nationalist social revolutions; examines through lectures and discussion the historical antecedents and the political, economic, social, and intellectual elements of the upheaval. Prerequisite: Upper-division standing. **Topic 9: Revolution in Twentieth-Century Latin America.** Same as History 346S. An introduction to recent Latin American history, with emphasis on phenomena that explain the apparent social unrest and political instability of the region. Only one of the following may be counted: History 346L, 366N (Topic: Revolution in Twentieth-Century Latin America), Latin American Studies 366 (Topic 9). Prerequisite: Upper-division standing.

**Topic 12: Modern Brazil.** Same as History 328M. The social, economic, political, and cultural forces that have shaped modern Brazil. Prerequisite: Upper-division standing.

**Topic 13: Revolution in Modern Latin America.** Same as History 346R. Comparison of the Mexican and Cuban revolutions and of their challenges to inter-American relations. Prerequisite: Upper-division standing.

**Topic 15: History of Modern Central America.** Same as History 350L (Topic 42: History of Modern Central America). Only one of the following may be counted: History 350L (Topic 42), 363K (Topic: History of Modern Central America), Latin American Studies 366 (Topic 15). Prerequisite: Upper-division standing.

**Topic 16: Culture and Identity in Colonial Mexico**. Same as History 350L (Topic 44: Culture and Identity in Colonial Mexico). Prerequisite: Upper-division standing.

**Topic 17: The Cuban Revolution and the United States.** Same as History 346T. The special economic and political relationship between the United States and Cuba from 1898 to 1967; and how the 1959 revolution affected the Cold War relationships between East and West, North and South. Only one of the following may be counted: History 346T, 366N (Topic: The Cuban Revolution and the US), Latin American Studies 366 (Topic: The Cuban Revolution and the US), 366 (Topic 17). Prerequisite: Upper-division standing.

**Topic 18: History of the Caribbean.** Same as History 350L (Topic 62: History of the Caribbean). Overview of Caribbean history from 1492 to the present. Topics include contact between European and native cultures, piracy, slavery, colonialism and decolonization, and revolutions. Prerequisite: Upper-division standing.

**Topic 19: Twentieth-Century Rural Latin America.** Same as History 346V. Examines causes of some of the unresolved conflicts affecting Latin America today, including the social-agrarian relationships linking landlords and campesinos; the role of the state and the impact of official ideologies involving indigenous people; religion and the Catholic Church; the history of rural institutions; and the success or failure of land reforms. Only one of the following may be counted: History 346V, 363K (Topic: Twentieth-Century Rural Latin America), Latin American Studies 366 (Topic 19). Prerequisite: Upper-division standing.

**Topic 20: Colonial Latin America through Objects.** Same as History 346J. Examines objects, such as paintings, reliquaries, monstrances, and churches from colonial Latin America in order to understand colonial culture. Includes critical reading of original texts. Only one of the following may be counted: History 346J, 363K (Topic: Colonial Latin America through Objects), Latin American Studies 366 (Topic 20). Prerequisite: Upper-division standing.

**Topic 21: Church and State in Latin America.** Same as History 346W and Religious Studies 368 (Topic 1: Church and State in Latin America). History of Church-state relations and religious politics in modern Latin America, with emphasis on the nineteenth to early twentieth-century periods. Only one of the following may be counted: History 346W, 363K (Topic: Church and State in Latin America), Latin American Studies 366 (Topic 21), Religious Studies 368 (Topic 1). Prerequisite: Upper-division standing.

**Topic 22: Reimagining Cuba, 1868-Present.** Same as African and African Diaspora Studies 374E (Topic 4) and History 347C. Explores

Cuban-United States relations from the nineteenth century to the present, including issues of empire and transnationalism, and social change engagements between Cuba and the United States before and after the Cuban Revolution. Only one of the following may be counted: African and African Diaspora Studies 374E (Topic: Reimagining Cuba, 1868-Present), 374E (Topic 4), History 347C, 363K (Topic: Reimagining Cuba, 1868-Present), Latin American Studies 366 (Topic 22). Additional prerequisite: Upper-division standing.

**Topic 23: Dictatorship, Dirty War, and Democracy in Latin America.** Same as History 350L (Topic 66). Only one of the following may be counted: History 350L (Topic: Dictator/Dirty War in Latin America), 350L (Topic 66), Latin American Studies 366 (Topic: Dictator/Dirty War in Latin America), 366 (Topic 23).

**Topic 24: Rethinking the Conquest of Mexico.** Same as History 350L (Topic 75). Explores the "conquest" of Mexico and the social, cultural, political, and economic processes which were set in motion by the Spanish invasion of Mexico. Only one of the following may be counted: History 350L (Topic: Rethinking Conquest of Mexico), 350L (Topic 75), Latin American Studies 366 (Topic: Rethinking Conquest of Mexico), 366 (Topic 24), Tutorial Course 357 (Topic: Rethinking Conquest of Mexico).

**Topic 25: The Religious Tradition in Latin America.** Same as History 350L (Topic 76) and Religious Studies 368 (Topic 3). Explores the different ways in which religion has helped to define the political, social, and philosophical structures of Latin America from colonial times to the present. Only one of the following may be counted: History 350L (Topic: The Religious Tradition in Latin America), 350L (Topic 76), Latin American Studies 366 (Topic: The Religious Tradition in Latin America), 366 (Topic 25), Religious Studies 368 (Topic 3).

Topic 26: Visual and Material Culture in Colonial Latin America. Same as History 350L (Topic 78). Focuses on the visual and material culture of colonial Spanish America. Only one of the following may be counted: History 350L (Topic: Visual and Material Culture in Colonial Latin America), 350L (Topic 78), Latin American Studies 366 (Topic: Visual and Material Culture in Colonial Latin America), 366 (Topic 26). Topic 27: Cultural Citizenship in the United States and Latin America. Same as History 363K (Topic 1). An introduction to the history of relations between the United States and Latin America. Designed to prepare each student for a potential experience in Latin America (or with Latino communities in the United States) such as study abroad, research, and/or community engagement. Three lecture hours a week for one semester. Only one of the following may be counted: History 363K (Topic: Cultural Citizenship in the United States and Latin America), 363K (Topic 1), Latin American Studies 366 (Topic: Cultural Citizenship in the United States and Latin America), 366 (Topic 27). Topic 28: Argentina: Populism and Insurrection. Same as History 363K (Topic 2). An overview of principal trends and issues in Argentine history from independence to the present. Only one of the following may be counted: History 363K (Topic: Argentina: Populism and Insurrection), 363K (Topic 2), Latin American Studies 366 (Topic: Argentina: Populism and Insurrection), 366 (Topic 28).

Topic 29: Religion, Conquest, and Conversion in Colonial Latin America. Same as History 363K (Topic 3) and Religious Studies 368 (Topic 4). Focuses on the histories of the Catholic Church and religious devotion in colonial Latin America between 1521 and 1821. Only one of the following may be counted: History 363K (Topic: Religion, Conquest, and Conversion in Colonial Latin America), 363K (Topic 3), Latin American Studies 366 (Topic: Religion, Conquest, and Conversion in Colonial Latin America), 366 (Topic 29), Religious Studies 368 (Topic: Religion, Conquest, and Conversion in Colonial Latin America), 368 (Topic 4).

**Topic 31: Afro-Latin America.** Same as African and African Diaspora Studies 372G (Topic 10) and History 350L (Topic 68). Examines the historical experiences of people of African descent in Latin America

and the Caribbean beginning in the slavery era, and focuses on the histories of Afro-Latin Americans after emancipation. Only one of the following may be counted: African and African Diaspora Studies 372G (Topic: Afro-Latin America), 372G (Topic 10), 374E (Topic: Afro-Latin America), History 350L (Topic: Afro-Latin America), 350L (Topic 68), Latin American Studies 366 (Topic: Afro-Latin America), 366 (Topic 31). Additional prerequisite: Upper-division standing.

**Topic 32: Latin America in the Nineteenth Century.** Same as History 350L (Topic 86). Questions the geographical category of Latin America by examining the kinds of trends and forces of the nineteenth century that contributed to its conceptual emergence and to its growing political, economic, and cultural significance on the global stage. Only one of the following may be counted: History 350L (Topic: Latin America in the Nineteenth Century), 350L (Topic 86), Latin American Studies 366 (Topic: Latin America in the Nineteenth Century), 366 (Topic 32).

**Topic 34: The Bible in the Colonial Americas.** Same as Core Texts and Ideas 375 (Topic 6), History 363K (Topic 5), and Religious Studies 366 (Topic 3). Varied perspectives on the central role played by the Old Testament in the construction of colonial cultures in the Americas. Only one of the following may be counted: Core Texts and Ideas 375 (Topic: The Bible in the Colonial Americas), 375 (Topic 6), History 363K (Topic: The Bible in the Colonial Americas), 363K (Topic 5), Latin American Studies 366 (Topic: The Bible in the Colonial Americas), 366 (Topic 34), Religious Studies 366 (Topic: The Bible in the Colonial Americas), 366 (Topic 3). Additional prerequisite: Upper-division standing.

# LAS 370P. Topics in Luso-Brazilian Literature, Culture, Civilization, and Linguistics.

Taught in Portuguese. Three lecture hours a week for one semester. Latin American Studies 322 and 370P may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Portuguese 611D, 611S, 612, 312L, or 516; additional prerequisites vary with the topic.

**Topic 1: Brazil: An Introduction.** Same as Portuguese 375 (Topic 5: Brazil: An Introduction). Prerequisite: Six semester hours of upperdivision coursework in Portuguese.

**Topic 2: Introduction to Literatures and Cultures.** Same as Portuguese 328C. Overview of Luso-Brazilian literatures and cultures, including the arts and popular expressions from a multidisciplinary perspective. Among the regions studied are Brazil, Portugal, and related areas in Africa. Three lecture hours a week for one semester. Additional prerequisite: Portuguese 611D, 611S, 612, 312L, or 516.

**Topic 3: Contemporary Brazilian Film.** Same as Portuguese 350F (Topic 1). Explores recent filmmaking in Brazil as an art form and as a method of articulating important aspects and concerns of contemporary Brazilian society. Topics include cinema and development, modernization, national and regional identity, race, social exclusion, violence, and neoliberalism. Only one of the following may be counted: Latin American Studies 370P (Topic 3), Portuguese 350F (Topic 1), 350K.

**Topic 4: Brazilian Film and Culture.** Same as Portuguese 350F (Topic 2). Students will be given a critical overview of Brazilian cinema, from the silent era to the present day, with an emphasis on the late twentieth- and early twenty-first-centuries. Only one of the following may be counted: Latin American Studies 370P (Topic 4), Portuguese 350F (Topic 2), Portuguese 350K.

**Topic 5: Gender, Sexuality, and Labor in Brazilian Culture.** Same as Portuguese 375 (Topic 6). Introduction to the vast spectrum of working women characters, including maids, prostitutes, teachers, factory workers, doctors, street vendors, and unpaid housewives, in Brazilian literature and film, in order to examine the roles of race and gender in shaping the stereotypes surrounding women's labor in modern Brazil. Latin American Studies 370P (Topic 5) and Portuguese 375 (Topic 6) may not both be counted.

**Topic 6: Global Brazil: Immigration and Diaspora in Brazilian Culture.** Same as Portuguese 375 (Topic 7). Examination of twentiethcentury literature, films, and other cultural artifacts that capture the multicultural reality of Brazilian society and challenge the image of Brazil as a unified, harmonious, racially-mixed nation. Subjects include contemporary textual and visual representations of the Brazilian diaspora in the United States and Europe. Latin American Studies 370P (Topic 6) and Portuguese 375 (Topic 7) may not both be counted. Additional prerequisite: Portuguese 327C and one of the following: 328C, 330L, or Portuguese Civilization 320E.

**Topic 7: Race and Slavery in Brazil.** Same as Portuguese 348 (Topic 1). Focus on the differing meanings and values attributed by major Brazilian writers to the national "race." Topics include images of slavery and slaves in the Brazilian abolitionist literature; fictional and self-representational literature by Afro-Brazilian authors; the debate around the "Black Aesthetic"; and finally, the representation of Afro-Brazilians in other media such as film, painting, television, and popular music (samba, hip-hop, funk). Only one of the following may be counted: Latin American Studies 370P (Topic: The Color of Progress: Race and Slavery in Brazil), 370P (Topic 7), Portuguese 348 (Topic 1), 375 (Topic: The Color of Progress: Race and Slavery in Brazil).

**Topic 8: Afro-Brazilian Diaspora.** Same as Portuguese 348 (Topic 2). Examines Afro-Brazilians in the post-abolition (1888 and after) era and the strategies deployed by cultural producers and participants in social movements to overcome the barriers to the achievement of political power and self-determination.

**Topic 9: Brazilian and African Dialogues.** Same as Portuguese 348 (Topic 3). A general introduction to the colonial and post-colonial experiences of Portuguese-speaking Africa. Overview of the socio-political and economic experiences of the lusophone African countries under colonialism. Examination of the armed struggle and the combative literary outpourings that impacted morale in the fight for independence.

**Topic 10: United States Latino Literatures and Cultures in Context.** Same as Portuguese 354. Examines the United States Latino literary and cultural production from a multidisciplinary perspective, through literature, film, music, and performance. Analyzes the literatures and experiences of Brazilian American writers and artists in their historical and cultural specificities. Three lecture hours a week for one semester. Latin American Studies 370P (Topic 10) and Portuguese 354 may not both be counted. Additional prerequisite: Portuguese 327C or 362, and three hours of upper-division coursework in Portuguese or Portuguese Civilization.

**Topic 11: Sociolinguistics.** Same as Portuguese 353. Explores the interrelationship of language and society with reference to the Portuguese-speaking world. Examines how socio-economic , political, and anthropological factors like race, social class, gender, age, and identity influence linguistics forms. Three hours a week for one semester. Latin American Studies 370P (Topic 11) and Portuguese 353 may not both be counted. Additional prerequisite: Portuguese 327C or 362, and 330L.

**Topic 12: Afro-Brazilians: Literature, Culture, Political Agency.** Same as Portuguese 341 (Topic 1). Only one of the following may be counted: Latin American Studies 370P (Topic: Afro-Brazilians: Literature, Culture, Political Agency), 370P (Topic 12), Portuguese 341 (Topic: Afro-Brazilians: Literature, Culture, Political Agency), 341 (Topic 1).

**Topic 13: Cultural Differences Between the United States and Brazil.** Same as Portuguese 341 (Topic 2). Only one of the following may be counted: Latin American Studies 370P (Topic: Cultural Differences between USA and Brazil), 370P (Topic 13), Portuguese 341 (Topic: Cultural Differences between USA and Brazil), 341 (Topic 2).

# LAS 370S. Topics in Hispanic Literature, Culture, Civilization, and Linguistics.

Taught in Spanish. Three lecture hours a week for one semester, or as required by the topic. Latin American Studies 322 and 370S may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Spanish 611D, 612, or 312L; additional prerequisites vary with the topic.

Topic 17: Indigenous Voices in Latin American Literature. Same as Spanish 356 (Topic 1). Only one of the following may be counted: Latin American Studies 370S (Topic 17), Spanish 350 (Topic 4), 356 (Topic 1). Additional prerequisite: Spanish 327C (or 327G) and three hours of upper-division coursework in Spanish or Spanish Civilization. **Topic 22: The Imagined Andes.** Same as Spanish 356 (Topic 2). Overview of literature and culture of the Andean regions. Three lecture hours a week for one semester. Only one of the following may be counted: Latin American Studies 370S (Topic: The Imagined Andes), 370S (Topic 22), Spanish 350 (Topic 12), 356 (Topic 2). Additional prerequisite: Spanish 327C (or 327G) and three hours of upper-division coursework in Spanish or Spanish Civilization.

**Topic 23: Violence in Contemporary Mexican Culture.** Same as Spanish 355 (Topic 6) and Women's and Gender Studies 340 (Topic 20). Studies the representation of violence in contemporary literary and cultural production in Mexico in order to understand social, political, and cultural implications of current violence there. Taught in Spanish. Only one of the following may be counted: Latin American Studies 370S (Topic 23), Spanish 350 (Topic 13), 355 (Topic 6), Women's and Gender Studies 340 (Topic 20). Additional prerequisite: Spanish 327C (or 327G) and three hours of upper-division coursework in Spanish or Spanish Civilization.

Topic 24: Gender Issues in Contemporary Latin American Cinema. Same as Spanish 350K (Topic 1) and Women's and Gender Studies 335 (Topic 6). Studies Latin American cinema as a device of gender system formation and reinforcement, and as criticism of patriarchal hegemony; discusses questions related to sexuality depicted in Latin American films. Subjects covered include: maternity, prostitution, machismo, children's sexuality, homosexuality, heterosexuality, and gender violence in films from the 1930s to present. Conducted in Spanish. Three lecture hours a week for one semester. Only one of the following may be counted: Latin American Studies 370S (Topic 24), Spanish 350 (Topic: Gender in Contemporary Latin American Cinema), 350K (Topic 1), Women's and Gender Studies 335 (Topic 6), 340 (Topic: Gender in Contemporary Latin American Cinema). Additional prerequisite: Spanish 327C, (or 327), (or 327G), and three hours of upper-division coursework in either Spanish or Spanish Civilization. Topic 25: Latin American Film and Culture. Same as Spanish 350K (Topic 3: Latin American Film and Culture). Overview of Latin American cinema from the silent era to present, with an emphasis on the last forty years. Subjects covered include: the development of the film industry (particularly in Argentina and Mexico in the 1930s and 1940s); the "New Wave" of Latin American cinema in the 1960s; and contemporary trends. Taught in Spanish. Three lecture hours a week for one semester. Only one of the following may be counted: Latin American Studies 370S (Topic 25), Spanish 350 (Topic: Latin American Film and Culture), 350K (Topic 3). Prerequisite: Spanish 325K, 325L, 326K, or 326L.

**Topic 26: Latin American Literature and Film.** Same as Spanish 350K (Topic 4: Latin American Literature and Film). Studies, in a broad sense, the connections between Latin American cinema and literature, through extensive readings and in-class movie exhibitions. A number of renowned literary works by Latin American authors and their film versions will be analyzed with a comparative approach. Only one of

the following may be counted: Latin American Studies 370S (Topic 26), Spanish 350 (Topic: Latin American Literature and Film), 350K (Topic 4), 352 (Topic: Literature and Cinema in Spanish America). Prerequisite: Spanish 325K, 325L, 326K, or 326L.

**Topic 27: Introduction to Literatures and Cultures.** Same as Spanish 328C. Overview of Iberian and/or Latin American literatures and cultures, including the arts and popular expressions, from a multidisciplinary perspective. Among the regions studied are Spain; North, Central, and South America; the Caribbean; and related areas in Africa. Three lecture hours a week for one semester. Only one of the following may be counted: Latin American Studies 370S (Topic 27), Spanish 328, 328C. Only one of the following may be counted: Latin American Studies 370S (Topic 3), 370S (Topic 27), Spanish 322K, 328C. Additional prerequisite: Spanish 611D, 612, or 312L.

Topic 28: Mediascapes: Literature and Media in the Caribbean. Same as Spanish 350K (Topic 5). Analyzes the relationship between literature and media technologies in contemporary Caribbean cultures. Examination of the notion and uses of Caribbean mediascapes; in other words, the uses of media technologies derived from film, television, the internet and YouTube, and the ways they are used and read in the Spanish Caribbean. Only one of the following may be counted: Latin American Studies 328 (Topic 5), 370S (Topic 28), Spanish 350K (Topic 5), Spanish Civilization 320C (Topic 2). Topic 29: Indigenous Voices: From Nezahualcoyotl to Radio. Same as Spanish 350K (Topic 6). Examines how Indigenous writers, intellectuals, and cultural producers have creatively established their own voices through writing and other forms of media. Only one of the following may be counted: Latin American Studies 370S (Topic: Indigenous Voices), 370S (Topic 29), Spanish 350 (Topic: Indigenous Voices), 350K (Topic 6).

**Topic 30: Fantastic Fiction from Latin America.** Same as Spanish 355 (Topic 1). Analysis of short stories by Latin American writers that in some way represent an alternative to realism. Latin American Studies 370S (Topic 30) and Spanish 355 (Topic 1) may not both be counted. **Topic 31: Nonfiction Narratives from Latin America.** Same as Spanish 355 (Topic 2). Study of nonfiction works written in contemporary Latin America as experimental narrative forms that offer insight about current political, social, and economic problems of the region. Examination of these realities through readings and careful analysis of the works of popular nonfiction Latin American writers.

**Topic 32: Jewish Voices from Latin America.** Same as Spanish 355 (Topic 3). Overview of popular Jewish writers from Brazil and Spanish America, with special emphasis on those who portray in their work the situation of the Jewish communities of their respective cities and countries. Only one of the following may be counted: Jewish Studies 363 (Topic: Latin American Jewish Writers), 363 (Topic 15), Latin American Studies 328 (Topic 4), 370S (Topic: Latin American Jewish Writers), 370S (Topic 32), Spanish 352 (Topic: Latin American Jewish Writers), 355 (Topic 3), Spanish Civilization 320C (Topic 1).

**Topic 33: Sex and Sexuality in Latin America.** Same as Spanish 355 (Topic 4). Examines different representations of sex, sexuality, and eroticism in the various cultures of Latin America. These concepts do not refer to explicit or provocative texts or images in books, films, or photographs alone. On the contrary, they include a vast gamut of life, love, pain, and social conflict. Only one of the following may be counted: Latin American Studies 370S (Topic: Sexo/Sexualidad en Latinoamerica), 370S (Topic 33), Spanish 352 (Topic: Sexo/Sexualidad en Latinoamerica), 355 (Topic 4).

**Topic 34: Revolutionary Imagination in Latin American Cultures.** Same as Spanish 355 (Topic 5). Explores literary expressions in Latin America that reflect a dissident or transgressive imaginary published during the revolutionary period (1960-1990). Examination of how different sociohistorical experiences require new narrative forms, and innovative ways of exploring and codifying collective community identities. Only one of the following may be counted: Latin American Studies 370S (Topic: Revolutionary Imagination in Latin American Literature), 370S (Topic 34), Spanish 352 (Topic: Revolutionary Imagination in Latin American Literature), 355 (Topic 5). **Topic 36: East/West/New World Encounters.** Same as Spanish 355 (Topic 7). Survey of works mostly in the Latin American and Hispanic literary tradition in which images or themes related to the East (Asia, Eastern Africa, the Middle East) are developed. Only one of the following may be counted: Latin American Studies 370S (Topic: Visions of the East in Latin American Writing), 370S (Topic 36), Spanish 352 (Topic: Visions of the East in Latin American Writing), 355 (Topic 7).

**Topic 37: Memory and Writing in Caribbean Culture.** Same as Spanish 355 (Topic 8). Studies literary works from the greater Caribbean basin (with a focus on Cuba and Puerto Rico) in which the act of remembering is emphatically dramatized and described. Only one of the following may be counted: Latin American Studies 370S (Topic: Writing and Memory in Caribbean Literature), 370S (Topic 37), Spanish 355 (Topic 8), 375 (Topic: Writing and Memory in Caribbean Literature).

Topic 38: Literary Figurations in the Multimedia Age. Same as Spanish 355 (Topic 9). Focuses on the figurations of sounds and images in literary language in the context of the multimedia environment of modern and contemporary Latin America. Only one of the following may be counted: Latin American Studies 370S (Topic: Literary Figurations in the Multimedia Age), 370S (Topic 38), Spanish 352 (Topic: Literary Figurations in the Multimedia Age), 355 (Topic 9). Topic 41: Contemporary Mesoamerican Indigenous Literatures. Same as Spanish 356 (Topic 3). Examines the early Mesoamerican mythological narrative, Popol Wuj, as well as twentieth-century Central American texts. Explores ethnicity, class, gender, and traditional cultures as main factors in regional negotiations of identity constructions. Only one of the following may be counted: Latin American Studies 370S (Topic: Contemporary Indigenous Literature), 370S (Topic 41), Spanish 352 (Topic: Contemporary Indigenous Literature), 356 (Topic 3).

**Topic 42: African Diasporas.** Same as Spanish 358 (Topic 1). Analysis of the sociocultural contexts of the African diaspora in the Americas with particular focus on the Caribbean and Brazil. Focuses on the contributions of the African diasporic populations and the stylistic strategies through which they constructed their social, political, and cultural agency. Only one of the following may be counted: Latin American Studies 370S (Topic: African Diaspora in Latin America and the Caribbean), 370S (Topic 42), Spanish 358 (Topic 1), 375 (Topic: African Diaspora in Latin America and the Caribbean).

**Topic 43: United States Latino Literatures and Cultures in Context.** Same as Spanish 359. Examines the United States Latino literary and cultural production from multidisciplinary perspectives, such as literature, film, music, and performance. Analysis of the literatures and experiences of United States Latino writers and artists in their historical and cultural specificities. Three lecture hours a week for one semester. Latin American Studies 370S (Topic 43) and Spanish 359 may not both be counted. Additional prerequisite: Spanish 327C (or 327G) or 327N, and 328C.

**Topic 44: Contemporary Caribbean Literature.** Same as Spanish 352 (Topic 4). Only one of the following may be counted: Latin American Studies 370S (Topic: Contemporary Caribbean Literature), 370S (Topic 44), Spanish 352 (Topic: Contemporary Caribbean Literature), 352 (Topic 4). Prerequisite: Spanish 611D, 612, or 312L.

#### LAS 378. Capstone Course in Latin American Studies.

Three lecture hours a week for one semester Prerequisite: Upper-division standing.

#### LAS 379. Conference Course in Latin American Studies.

Supervised individual study of selected problems in Latin American studies. Conference course. May be repeated for credit. Prerequisite: Upper-division standing and consent of instructor and the undergraduate adviser in Latin American studies.

#### LAS 679H. Honors Tutorial Course.

For honors candidates in Latin American studies. Individual reading of selected works for one semester, followed in the second semester by the writing of an honors thesis. Conference course for two semesters. Prerequisite: For Latin American Studies 679HA, Latin American Studies 359H, admission to the Latin American Studies Honors Program, and written consent of the Latin American Studies Honors Program adviser; for 679HB, Latin American Studies 679HA.

# **Department of Linguistics**

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

## American Sign Language: ASL

#### **Lower-Division Courses**

#### ASL 601C. Accelerated First-Year American Sign Language.

Introduction to American Sign Language and its vocabulary and sentence structure. A six-hour course comparable to American Sign Language 506 and 507. Six lecture hours a week for one semester. Only one of the following may be counted: American Sign Language 601C, 601D, 506. American Sign Language 601C and 507 may not both be counted. Offered on the letter-grade basis only.

#### ASL 601D. American Sign Language I: Beginning.

This course focuses on the development of beginner-level comprehension and production skills in American Sign Language. Students learn how to attend to visual language and use their hands and body for producing ASL constructions. Elementary vocabulary and grammar is covered, along with information about Deaf culture. Six lecture hours a week for one semester. Only one of the following may be counted: American Sign Language 601C, 601D, 506. American Sign Language 601D and 507 may not both be counted. Offered on the letter-grade basis only.

#### ASL 610D. American Sign Language II: Beginning.

Focuses on the development of intermediate-level proficiency in ASL. An introduction to more complex grammatical constructions with the goal of engaging in conversations in ASL on a variety of topics. Examines the historical aspects of the Deaf community and related themes. Six lecture hours a week for one semester. Only one of the following may be counted: American Sign Language 610D, 611C, 312K. American Sign Language 507 and 610D may not both be counted. Offered on the lettergrade basis only. Prerequisite: American Sign Language 601D or 507 with a grade of at least C.

#### ASL 311D. American Sign Language III: Intermediate.

Focuses on maintaining and building upon a student's intermediate ASL skills. Grammar coverage includes complex constructions that involve the signing space, and vocabulary building includes comparisons between English words and ASL signs in order for the learner to make appropriate vocabulary choices in their ASL production. Complex questions facing the contemporary Deaf community are discussed. Three lecture hours a week for one semester. American Sign Language 311D and 312L may not both be counted. American Sign Language 611C and 311D may not both be counted. Offered on the letter-grade basis only. Prerequisite: American Sign Language 601C, 610D, or 312K with a grade of at least C.

### **Upper-Division Courses**

#### ASL 320. Advanced American Sign Language Conversation.

Advanced development of conversational skills in American Sign Language, with a focus on sophisticated linguistic structures and important issues in Deaf studies. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: American Sign Language 311D or 312L with a grade of at least C.

#### ASL 326. Sign Languages and Signing Communities.

Same as Linguistics 350 (Topic 3: Sign Languages and Signing Communities). Examines the grammar of signed languages, their use in signing communities, and the acquisition of signed languages as first languages. No knowledge of American Sign Language is required. Three lecture hours a week for one semester. May not be counted toward fulfillment of the foreign language requirement for any bachelor's degree. Prerequisite: Upper-division standing.

#### ASL 336. Introduction to Sign Interpreting.

Introduction to sign interpreting from American Sign Language into English and from English into American Sign Language. Topics include the ethics of interpreting and the problems that arise in interpreting in different social and professional situations. Three lecture hours a week for one semester. Prerequisite: American Sign Language 311D or 312L with a grade of at least C.

# ASL 350. Topics in American Sign Language, Deaf Studies, and Interpreting.

Three lecture hours a week for one semester. Additional hours may be required for some topics. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: American Sign Language Literature.** Examines American Sign Language literature; includes narratives, language games, and poetry. Three lecture hours a week for one semester. American Sign Language 350 (Topic: American Sign Language Literature) and 350 (Topic 1) may not both be counted. Additional prerequisite: American Sign Language 610D with a grade of at least C, or credit or registration in American Sign Language 311D or 312L.

#### ASL 352. Deaf Culture.

Introduction to aspects of the culture of Deaf people, including their history, language, and contributions to the United States and/or to other countries. Themes explored include the role of educational institutions within Deaf networks and linguistic, ethnic, and cultural diversity throughout the community. Three lecture hours a week for one semester. American Sign Language 350 (Topic: Deaf Culture) and 352 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Upperdivision standing.

#### ASL 357. Undergraduate Research.

Supervised research experience. Individual instruction. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: Upperdivision standing, American Sign Language 601D with a grade of at least B, and consent of instructor.

# Linguistics: LIN

### **Lower-Division Courses**

### LIN 306. Introduction to the Study of Language.

Survey of major areas of linguistics: sound systems, grammatical structures, historical development of languages, language families and linguistic universals, dialect differences and their social significance. Three lecture hours a week for one semester.

#### LIN 312. Interdisciplinary Approaches to Language.

An interdisciplinary and multidisciplinary introduction to the manifold aspects of language. Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### LIN 312C. Culture and Communication.

Same as Anthropology 307. An introduction to the study of culture through communication and the theory of signs. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Anthropology 307, Linguistics 312 (Topic: Culture and Communication), 312C.

#### LIN 312D. Languages around the World.

Explores the language families of the world. Considers such questions as: what does it mean for languages to be related, and how do we know that they are related in the first place; why are there only a handful of language families in Europe and Africa while there are scores in South America and New Guinea; What can we say about where a language or language family may have originated; and how much living history is being lost as languages become endangered or extinct when people stop speaking them? Three lecture hours a week for one semester. Linguistics 312 (Topic: Languages Around the World) and 312D may not both be counted.

#### LIN 312E. Language of Sign and Gesture.

Explores how language, a faculty that arises in the brain, is expressed by the body, both for spoken languages (via the vocal tract) and for signed languages (via the hands and face). Also includes an examination of how language, a special cognitive faculty unique to humans, intersects and overlaps with other communication systems, with a focus on gesture, the nonlinguistic communicative systems used by humans and some nonhuman species. Three lecture hours a week for one semester. Linguistics 312 (Topic: Language in the Body) and 312E may not both be counted.

#### LIN 313. Language and Computers.

Natural language processing, including spam filtering, dialogue systems, spelling and grammar correction, forensic linguistics, cryptography, and machine translation. Studies how these systems function, the difficulties in implementing them, and implications of such technologies for society. Three lecture hours a week for one semester. Linguistics 312 (Topic: Language and Computers) and 313 may not both be counted.

#### LIN 315. Speech Science.

Same as Communication Sciences and Disorders 315S.

Neurophysiological mechanisms underlying the encoding and decoding of speech. Three lecture hours a week for one semester. Only one of the following may be counted: Communication Sciences and Disorders 315S, 358S, Linguistics 315, 358S. Prerequisite: For communication sciences and disorders majors, nine hours of lower-division coursework in Communication Sciences and Disorders.

#### LIN 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Linguistics.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study

Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Linguistics. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### LIN 321L. American English.

Same as English 321L. An overview of the historical development of English in the Americas. Attention to regional, social, and ethnic differences, and their implications for public education. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### LIN 322. Gypsy Language and Culture.

Same as English 364D (Topic 1). Linguistic introduction to Romani; relationship to languages of India; history from 280 BC; modern dialects and international standard language; history and culture as reflected in the language. Three lecture hours a week for one semester. Only one of the following may be counted: Asian Studies 372 (Topic 13), English 350E (Topic: Gypsy Language and Culture), 364D (Topic 1), Linguistics 322, Russian, East European, and Eurasian Studies 325 (Topic 1). Prerequisite: For English majors, nine semester hours of coursework in English or rhetoric and writing; for others, upper-division standing.

#### LIN 323L. English as a World Language.

Same as English 323L. An account of the spread of English around the world; national, social, and regional varieties. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### LIN 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Linguistics.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Linguistics. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

# LIN 344K. Phonetics: The Production and Perception of Speech Sounds.

Articulation and transcription of speech sounds; distinctive feature systems; physiological and acoustical aspects of phonetics; common phonological processes. Three lecture hours a week for one semester.

#### LIN 345. Language Change and Language Variation.

Introduction to the study of how languages change and the principles developed by linguists to account for these changes. Investigation of the various domains in which change occurs, and the social and linguistic motivations for change. Examines the methods linguists use to determine the earlier profile of a language or its parent language, before identified changes occurred. Three lecture hours a week for one semester. Prerequisite: Linguistics 344K.

#### LIN 346. Exploring Accents.

Explores how different speakers of the same language differ in their pronunciation, according to regional and social groupings. Acoustic analysis of English speakers will provide the basis of an inquiry into how and why accents differ. Three lecture hours a week for one semester. Linguistics 346 and 350 (Topic: Exploring Accents) may not both be counted. Prerequisite: Linguistics 344K.

#### LIN 350. Special Topics in the Study of Language.

Nontechnical examination of social, educational, and political problems to which current linguistic knowledge is relevant. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Language and the Brain.** Same as Communication Sciences and Disorders 350. Delves into the neuroanatomical and functional operations of the major brain structures that underlie speech/ language. Subjects include hemispheric dominance for language, neurological and language breakdowns in aphasia, and brain imaging methods and studies of language representation. Additional prerequisite: Upper-division standing.

**Topic 2: Language and Thought.** Study of the relation between language and thought, using a cognitive science approach. Examines the words people use and how people think; whether language structure affects thought; and some cognitive aspects of language. Prerequisite: Upper-division standing.

**Topic 3: Sign Languages and Signing Communities.** Same as American Sign Language 326. Examines the grammar of signed languages, their use in signing communities, and the acquisition of signed languages as first languages. No knowledge of American Sign Language is required. May not be counted toward fulfillment of the foreign language requirement for any bachelor's degree. Prerequisite: Upper-division standing.

**Topic 4: Language and People.** Areas in language and linguistics that most directly impact people, such as language and ethnicity, language and nation-building, and language politics. Prerequisite: Upper-division standing.

**Topic 5: Bilingual Language Acquisition.** Examines various aspects of bilingual first language acquisition including phonology, morphology, and syntax, as well as the child's use of his/her languages. Prerequisite: Upper-division standing.

**Topic 6: Indigenous Languages of the Americas.** Same as Latin American Studies 322 (Topic 15: Indigenous Languages of the Americas). Examines various aspects of languages in the Americas, including their linguistic structures, the cultural domains in which they exist, and their histories of language contact and change. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

Topic 7: Language, Cognition and Rhythm. Explores connections between language and various musical forms, and what the psychological basis for these connections might be. Reading materials are drawn primarily from the published literature in psychology, linguistics, and music perception. Linguistics 350 (Topic: Language, Cognition, & Rhythm) and 350 (Topic 7) may not both be counted. Additional prerequisite: Upper-division standing. Topic 9: Psycholinguistics. Examines the psychological mechanisms that people use in learning, comprehending, and producing language. Prerequisite: Upper-division standing.

**Topic 10: How to Describe a Language.** Practical introduction to language documentation and preservation. Subjects include language diversity and practical methods for describing, documenting, and preserving languages, with an emphasis on the phonological and morphological analysis of restricted data sets, as well as the role of linguists in conjunction with communities of speakers who wish to document or revitalize their languages. Three lecture hours a week for one semester. Linguistics 350 (Topic: How to Describe a Language) and 350 (Topic 10) may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 11: Speech Intelligibility.** An overview of the main empirical findings on talker-, listener-, and signal-related factors that shape speech intelligibility, the degree to which spoken language can be comprehended. Explores how signal-related (physical), peripheral (auditory-perceptual), and system-related (mental) factors condition

variation in both the production and perception of intelligible speech. Also examines how variation in intelligibility conditions different levels of spoken language processing and different tasks that the listener is performing during spoken language comprehension. Three lecture hours a week for one semester. Linguistics 350 (Topic: Speech Intelligibility) and 350 (Topic 11) may not both be counted. Additional prerequisite: Linguistics 344K, 358S, or consent of instructor.

**Topic 12: Analyzing Text Data: A Statistics Toolkit for Linguists.** Introduction to statistical concepts and analyses via language problems and linguistic data sets. Three lecture hours a week for one semester. Linguistics 350 (Topic: Words in a Haystack) and 350 (Topic 12) may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 14: Linguistics of Writing.** How language relates to the written word and how linguistic analysis is intertwined with writing. Subjects include the typology and evolution of writing systems, the psycholinguistics of reading and writing, and the role of writing in contemporary language politics. Linguistics 350 (Topic: Linguistics of Writing Systems) and 350 (Topic 14) may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 15: Computational Semantics.** Studies methods for automatically learning and analyzing word meanings and sentence meanings. Encompasses vector space models as well as logic-based semantics. Linguistics 350 (Topic: Computational Semantics) and 350 (Topic 15) may not both be counted. Additional prerequisite: Upperdivision standing.

#### LIN 353C. Introduction to Computational Linguistics.

Introduction to key representations and algorithms used in computational linguistics and the main natural language processing applications. Three lecture hours a week for one semester. Linguistics 350 (Topic: Introduction to Computational Linguistics) and 353C may not both be counted.

#### LIN 353N. Natural Language Processing.

Introduces theoretical and applied topics relating to natural language processing, including machine translation, search, automatic summarization, and dialog systems. Three lecture hours a week for one semester. Only one of the following may be counted: Computer Science 378 (Topic: Natural Language Processing), Linguistics 350 (Topic: Natural Language Processing), 353N.

#### LIN 357. Undergraduate Research.

Supervised research experience. Individual instruction. May be repeated for credit. Offered on the pass/fail basis only. Prerequisite: Upper-division standing and Linguistics 306 with a grade of at least C-.

#### LIN 358Q. Supervised Research.

Supervised student-initiated research. Individual instruction. May be repeated for credit. Offered on the pass/fail basis only. Prerequisite: Upper-division standing and Linguistics 306 with a grade of at least C-.

#### LIN 360K. Introduction to English Grammar.

Introduction to the study of the syntactic structure of modern English from the viewpoint of generative grammar. Three lecture hours a week for one semester. English 360K and Linguistics 360K may not both be counted. Prerequisite: Upper-division standing.

#### LIN 364M. History of the English Language.

Same as English 364M. Development of sounds, forms, and vocabulary of the English language from its origins to the present. Three lecture hours a week for one semester. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

#### LIN 372K. Sound Patterns: From Sound to Word.

Methods and principles of analyzing the sound systems of languages. Three lecture hours a week for one semester. Prerequisite: Linguistics 344K.

# LIN 372L. Syntax and Semantics: The Structure and Meaning of Utterances.

Methods and principles of describing the syntactic systems of languages. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and Linguistics 306.

#### LIN 373. Topics in Linguistics and Related Disciplines.

Introduction to the study of the areas of linguistics that involve other disciplines, such as sociolinguistics, psycholinguistics, mathematical methods in linguistics. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Child Language.** Examination of theory and research concerning the development of language in the child. Linguistics 373 (Topic 1) and Psychology 333P may not both be counted. Prerequisite: Upper-division standing.

**Topic 2: Language and Speech in American Society.** Same as American Studies 321 (Topic 2: Language and Speech in American Society), Anthropology 325N, and Sociology 352M (Topic 3: Language and Speech in American Society). Prerequisite: Upper-division standing, and Anthropology 302, 305, 307, or Linguistics 306. **Topic 3: Language in Culture and Society.** Same as Anthropology 325M and Sociology 352M (Topic 4: Language in Culture and Society). Language as a cultural resource; functions of language in society; survey of language communities. Prerequisite: Anthropology 302, 305, 307, or Linguistics 306; or consent of instructor.

**Topic 7: Introduction to Cognitive Science.** Same as Cognitive Science 360 (Topic 1: Introduction to Cognitive Science) and Philosophy 365 (Topic 2: Introduction to Cognitive Science). Prerequisite: Upperdivision standing.

**Topic 9: The German Language: Historical Perspectives.** Same as Anthropology 320L (Topic 9) and German 369 (Topic 4). Only one of the following may be counted: Anthropology 320L (Topic 8: German and English: Historical Perspectives), 320L (Topic 9), Classical Civilization 348 (Topic 8: German and English: Historical Perspectives), 348 (Topic 9: The German Language: Historical Perspectives), German 369 (Topic 4), Germanic Civilization 327E (Topic 9: German and English: Historical Perspectives), Linguistics 373 (Topic 8: German and English: Historical Perspectives), 373 (Topic 9). Additional prerequisite: Three semester hours of upper-division coursework in German or Linguistics.

Topic 10: Language, Culture, and the Texas German Experience. Same as American Studies 370 (Topic 47), Anthropology 324L (Topic 55), and German, Scandinavian, and Dutch Studies 351C. The evolution of the culture and language of German immigrants to Texas from the 1840s through the present and how they have influenced other ethnic groups in Texas. Three lectures a week for one semester. Only one of the following may be counted: American Studies 370 (Topic: Language, Culture, and the Texas German Experience), 370 (Topic 47), Anthropology 324L (Topic: Language, Culture, and the Texas German Experience), 324L (Topic 55), Germanic Civilization 327E (Topic 11) German, Scandinavian, and Dutch Studies 351C, Linguistics 350 (Topic: Language, Culture, and the Texas German Experience), 373 (Topic 10). Additional prerequisite: Upper-division standing. Topic 12: Endangered Languages. Same as Anthropology 320L (Topic 13). Examines campaigns to preserve and revitalize dying languages and explores views of language that underpin the anxieties and efforts of the language rights and revitalization movements. Only one of the following may be counted: Anthropology 320L (Topic:

LANG ENDANGERMENT/RIGHTS), 320L (Topic 13), Linguistics 373 (Topic: LANG ENDANGERMENT/RIGHTS), 373 (Topic 12) Additional prerequisite: Upper-division standing.

#### LIN 377. Syntactic Theory.

Introduction to formal syntax, which refers to the use of a mathematically precise formalism to model the syntax of human languages and test theories against the challenge of new data. Hands-on solving of syntax puzzles of increasing complexity. Three lecture hours a week for one semester. Linguistics 373 (Topic: Syntactic Theory) and 377 may not both be counted. Prerequisite: Linguistics 306 and 372L.

#### LIN 379. Conference Course in Linguistics.

Supervised individual study of selected problems in linguistics. Conference course. May be repeated for credit. Prerequisite: Six semester hours of upper-division coursework in linguistics.

#### LIN 679H. Honors Tutorial Course.

Supervised individual reading for one semester, followed by research and writing to produce a substantial paper. Conference course for two semesters. May be repeated for credit. Prerequisite: For 679HA, admission to the Linguistics Honors Program; for 679HB, Linguistics 679HA.

# Department of Mexican American and Latina/o Studies

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

## **Mexican American Studies: MAS**

### **Lower-Division Courses**

# MAS 301. Introduction to Mexican American and Latina/o Studies.

Three lecture hours a week for one semester. Mexican American Studies 301 and 319 (Topic: Introduction to Mexican American and Latina/o Studies) may not both be counted.

#### MAS 307. Introduction to Mexican American Cultural Studies.

An introduction to the theoretical and substantive issues covered under the interdisciplinary rubric of cultural studies. Explores the Mexican American cultural experience through the methodological approaches of historical analysis, cultural critique, and literary production. Three lecture hours a week for one semester.

# MAS 307C. Mexican American and Latina/o Folkore Across the United States.

Three lecture hours a week for one semester. Only one of the following may be counted: Anthropology 310L (Topic: Mex Amer/Lat Folk Across US), Mexican American Studies 307C, 319 (Topic: Mex Amer/Lat Folk Across US).

#### MAS 308. Introduction to Mexican American Policy Studies.

An introduction to the basics of policy analysis, employing demographic and empirical information on the Mexican American and Latino populations in the United States. Current policy issues such as bilingual education, affirmative action, the English-only movement, immigration, Latino consumers, Latino entrepreneurship, and NAFTA. Three lecture hours a week for one semester.

#### MAS 308C. Latino Politics: Voter ID, Health, and Education.

Three lecture hours a week for one semester. Only one of the following may be counted: Government 314 (Topic: Latino Pol:Voter ID/Health/ EDU), Mexican American Studies 308C, 319 (Topic: Latino Pol:Voter ID/ Health/EDU).

#### MAS 309. Bilingualism in the Americas.

Analyzes the linguistic, cognitive, social, and cultural aspect of bilingualism in the Americas. Three lecture hours a week for one semester. Mexican American Studies 309 and 319 (Topic: Bilingualism in the Americas) may not both be counted.

#### MAS 310 (TCCN: HUMA 1305). Chicanos in American Society.

Same as Sociology 309. Introduction to the study of American character and its bearing on the Chicano experience. Three lecture hours a week for one semester.

#### MAS 311. Ethnicity and Gender: La Chicana.

Same as Sociology 308D and Women's and Gender Studies 301 (Topic 6). Three lecture hours a week for one semester. Only one of the following may be counted: Mexican American Studies 311, 319 (Topic 1), Sociology 308 (Topic: Ethnicity and Gender: La Chicana), 308D, Women's and Gender Studies 301 (Topic 6).

#### MAS 314. Mexican American Literature and Culture.

Same as English 314V (Topic 3). Representative Chicano writers and genres, such as poetry, prose fiction, and theatre. Three lecture hours a week for one semester. English 314V (Topic 3) and Mexican American Studies 314 may not both be counted. May not be substituted for English 316L (or 316K), 316M (or 316K), 316N (or 316K), 316P (or 316K). Prerequisite: English 303C (or 603A), Rhetoric and Writing 306, 306Q, or Tutorial Course 303C (or 603A).

#### MAS 316. History of Mexican Americans in the United States.

Same as History 314K. Examines the origin and growth of the Mexican American community in the United States. Three lecture hours a week for one semester. History 314K and Mexican American Studies 316 may not both be counted.

#### MAS 318. Mexican American Culture.

Same as Anthropology 318L. Mexican American cultural distinctiveness in the areas of social organization, child rearing, food culture, folklore, language, and religion. Three lecture hours a week for one semester.

#### MAS 319. Special Topics.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

**Topic 2: The Chicano Movement**. Analyzes the history and legacy of the Chicano Movement in order to understand its origins, strategies, challenges, and successes. Mexican American Studies 319 (Topic: The History of the Chicano Movement) and 319 (Topic 2) may not both be counted.

**Topic 3: Latino Histories.** Same as History 317L (Topic 11). Explore the cultures, politics, and policies that shape the many Latino histories in the United States. Only one of the following may be counted: History 317L (Topic: Latino Histories), 317L (Topic 11), Mexican American Studies 319 (Topic: Latino Histories), 319 (Topic 3). **Topic 4: Mexican American Women, 1910-Present.** Same as History 317L (Topic 12) and Women's and Gender Studies 301 (Topic 13). Examines the history of Mexican and Mexican American women in the United States from the twentieth century to the present. Only one of the following may be counted: History 317L (Topic: Mexican American Women, 1910-Present), 317L (Topic 12), Mexican American Studies 319 (Topic: Mexican American Women, 1910-Present), 319 (Topic 4), Women's and Gender Studies 301 (Topic: Mexican American Women, 1910-Present), 301 (Topic 13).

**Topic 5: Chicano Literature and Popular Culture.** Explores the ways in which Chicana/o creative writers have addressed their experiences in the United States. Mexican American Studies 319 (Topic: Chicano Literature and Popular Culture) and 319 (Topic 5) may not both be counted.

**Topic 6: Comparative Latina/o Immigration to the United States.** Only one of the following may be counted: Mexican American Studies 319 (Topic: Comparative Latina/o Immigration to the United States of America), 319 (Topic 6), Social Work 311 (Topic: Comparative Latina/o Immigration to the United States of America).

#### MAS 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Mexican American Studies.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Center for Mexican American Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### MAS 320L. Texas until 1845.

Same as History 320L. A study of Texas from before the European discovery through the exploration and mission periods to status as a Mexican colony and an independent republic. Three lecture hours a week for one semester. Only one of the following may be counted: History 320L, Mexican American Studies 320L, 374 (Topic: Texas until 1845). Three semester hours of Texas history may be substituted for half of the legislative requirement for American history. Prerequisite: Upper-division standing.

# MAS 326. Learning from Mexico City: NAFTA, Neoliberalism, and Narco Cultura.

Restricted to students participating in the summer program in Mexico City, Mexico. Examines the historic rise of neoliberal reform and narco culture as a tie to the North American Free Trade Agreement brokered between the United States, Canada, and Mexico in 1994. Three lecture hours a week for one semester. Mexican American Studies 326 and MAS 374 (Topic: NAFTA/Neoliberalism/Narco Cul) may not both be counted.

#### MAS 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Mexican American Studies.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Center for Mexican American Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer work is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### MAS 350. Advanced Grammar and Composition for Bilingual/ Bicultural Speakers.

Designed for Hispanic bilingual students whose home language is Spanish, but whose dominant language is English. The principal objective is to learn to write correctly and proficiently and to gain a strong cultural perspective on Latin America. The main focus of the course is on writing discourse, but oral language development is also addressed. Three lecture hours a week for one semester. International Business 172 (Topic 8), 272 (Topic 8), 372 (Topic 8) and Mexican American Studies 350 may not both be counted. Prerequisite: Spanish 612 or 312L.

#### MAS 361. Mexican American Cultural Studies Seminar.

Explores cultural studies literature as read through the experience of the Mexican-origin community in the United States. Discussions include race, class, and feminism. Students write a research paper and deliver a scholarly presentation. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and Mexican American Studies 307.

#### MAS 362. Mexican American Policy Studies Seminar.

Profiles the current economic status of Mexican Americans in the United States. Examines two dimensions of public policy: historical trends and comparisons with other ethnic groups. Students write a policy report and deliver a professional presentation. Three lecture hours a week for one semester. Mexican American Studies 362 and 374 (Topic: Mexican American Public Policy Issues) may not both be counted. Prerequisite: Upper-division standing and Mexican American Studies 308.

# MAS 363. Sociolinguistics in Mexican American and Latina/o Studies.

Examines the presence and use of language in the United States with focus on aspects affecting Latina/o communities. Three lecture hours a week for one semester. Mexican American Studies 363 and 374 (Topic: Sociolinguistics in Mexican American and Latina/o Studies) may not both be counted. Prerequisite: Upper-division standing.

#### MAS 363C. Mistranslating Latinos.

Three lecture hours a week for one semester. Only one of the following may be counted: Linguistics 373 (Topic: Mistranslating Latinos), Mexican American Studies 363C, 374 (Topic: Mistranslating Latinos), Philosophy 354 (Topic: Mistranslating Latinos), Spanish Civilization 320C (Topic: Mistranslating Latinos). Prerequisite: Upper-division standing.

#### MAS 364. History of the United States-Mexico Borderland.

Same as History 365G (Topic 12). Introduction to the history of the United States and Mexico border region. Three lecture hours a week for one semester. Only one of the following may be counted: History 365G (Topic: History of the United States-Mexico Borderland), 365G (Topic 12), Mexican American Studies 364, 374 (Topic: History of the United States-Mexico Borderland). Prerequisite: Upper-division standing.

#### MAS 371. Readings in Mexican American Studies.

Supervised readings with parallel work in relevant non-Chicano materials; preparation for Mexican American Studies 372. Individual instruction. Prerequisite: Mexican American Studies 310, 318, and 374; or consent of the director.

#### MAS 372. Research Seminar in Mexican American Studies.

Supervised research on a Mexican American topic chosen in consultation with adviser and leading to a full-length essay. Individual instruction. Prerequisite: Consent of the academic adviser.

#### MAS 373. Independent Research.

Individual instruction. May be repeated for credit. Prerequisite: Consent of the academic adviser.

#### MAS 374. Special Topics.

Three lecture hours a week for one semester. Additional hours are required for some topics. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 2: Life and Literature of the Southwest--Mexican American.

Same as English 342 (Topic 1: Life and Literature of the Southwest--Mexican American). Verse, fiction, travels, and memoirs, to acquaint students with the literature reflecting the social inheritance of Texas and the neighboring territory. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

**Topic 15: Latino Politics.** Same as Latin American Studies 337M (Topic 8: Latino Politics) and Government 370K (Topic 2: Latino Politics). Prerequisite: Six semester hours of lower-division coursework in government.

**Topic 16: Texas, 1914 to the Present.** Same as History 320R and Urban Studies 353 (Topic 2). The steady dissociation of Texas from its Old South status to a transitional state and a power in national politics. Three semester hours of Texas history may be substituted for half of the legislative requirement for American history. Prerequisite: Upper-division standing.

**Topic 22: Minorities and the Media.** Issues concerning minority or nondominant groups within the United States. Survey of minority communication problems: alienation, fragmentation, media and Internet access; criticism and feedback for minority groups based on racial/ethnic background, age, sex, disability, social or economic class, and sexual orientation. Only one of the following may be counted: Journalism 341J, Latin American Studies 322 (Topic 10: Minorities and the Media), Mexican American Studies 374 (Topic 22: Minorities and the Media), Urban Studies 354 (Topic: Minorities and the Media), Women's and Gender Studies 340 (Topic 21). Additional prerequisite: Upper-division standing.

**Topic 23: Mexican American Indigenous Heritage.** Same as Anthropology 322M (Topic 10: Mexican American Indigenous Heritage). The prehistory, history, and contemporary racial understanding of Mexican Americans. Prerequisite: Upper-division standing.

**Topic 32: Radical Latinos.** Same as American Studies 370 (Topic 39: Radical Latinos). Examines the social positioning and history of Latinas/os in the United States. Analyzes the histories of Latinas/ os who have gone against mainstream expectations, or who have challenged or critiqued the status quo in provocative and unexpected ways. Only one of the following may be counted: American Studies 370 (Topic Radical Latinos), 370 (Topic 39), Mexican American Studies 374 (Topic: Radical Latinos), 374 (Topic 32). Prerequisite: Upper-division standing.

**Topic 33: United States Latino and Latina Ethnographies.** Same as Anthropology 324L (Topic 42). Explores past and present anthropological representations of Latinos and Latinas in the United States. Only one of the following may be counted: Anthropology 324L (Topic: U.S. Latino/a Ethnographies), 324L (Topic 42), Mexican American Studies 374 (Topic: U.S. Latino/a Ethnographies), 374 (Topic 33).

**Topic 34: Writing Border Narratives.** Same as Creative Writing 325 (Topic 1). Examines the United States and Mexico border through the use of the personal essay in its various forms. Students write personal essays that focus on their relationships to the border. Only one of the following may be counted: Creative Writing 325 (Topic: Writing Border Narratives), 325 (Topic 1), English 325 (Topic: Writing Border Narratives), Mexican American Studies 374 (Topic: Writing Border Narratives), 374 (Topic 34). Additional prerequisite: Comparative Literature 315, English 303D (or 603B), 316L (or 316K), 316M (or 316K), 316P (or 316K), or Tutorial Course 303D (or 603B).

**Topic 35: Race and Citizenship in United States History.** Same as American Studies 370 (Topic 48) and History 350R (Topic 25). Uses primary and secondary sources to analyze how race and citizenship have functioned for populations of color in the United States. Only one of the following may be counted: American Studies 370 (Topic: Race and Citizenship in United States History), 370 (Topic 48), History 350R (Topic: Race and Citizenship in United States History), 350R (Topic 25), Mexican American Studies 374 (Topic: Race and Citizenship in United States History), 374 (Topic 35). **Topic 37: United States Catholic History.** Same as American Studies 327 (Topic 4), History 365G (Topic 1), and Religious Studies 346 (Topic 5). Examines how Catholicism and national identity work for Catholics in the United States, with an emphasis on Catholic women and Latinos/as. Only one of the following may be counted: American Studies 321 (Topic: United States Catholic History), 327 (Topic 4), History 365G (Topic: United States Catholic History), 365G (Topic 1), Mexican American Studies 374 (Topic: United States Catholic History), 374 (Topic 37), Religious Studies 346 (Topic: United States Catholic History), 346 (Topic 5).

**Topic 38: Feminist Interventions in Borderlands History.** Same as American Studies 370 (Topic 45) and Women's and Gender Studies 340 (Topic 45). Provides an in-depth understanding of the social, economic, and spatial transformations of the United States/Mexico borderlands in the nineteenth and early twentieth centuries. Only one of the following may be counted: American Studies 370 (Topic: Feminist Interventions in Borderlands History), 370 (Topic 45), Mexican American Studies 374 (Topic: Feminist Interventions in Borderlands History), 374 (Topic 38), Women's and Gender Studies 340 (Topic: Feminist Interventions in Borderlands History), 340 (Topic 45).

Topic 39: Latina/o Pop. Same as American Studies 370 (Topic 46). Examines how Latinas/os have been a major force in the production of popular culture. Only one of the following may be counted: American Studies 370 (Topic: Latina/o Pop), 370 (Topic 46), Mexican American Studies 374 (Topic: Latina/o Pop), 374 (Topic 39). Topic 40: Gender, Class, and Ethnicity American Literature and Film. Examines the ways in which authors and filmmakers construct gender, class, and identity in each of their texts. Only one of the following may be counted: English 344L (Topic: Gender/Class/Ethnic American Literature and Film), Mexican American Studies 374 (Topic: Gender/ Class/Ethnic American Literature and Film), 374 (Topic 40), Women's and Gender Studies 340 (Topic: Gender/Class/Ethnic American Literature and Film). Additional prerequisite: Upper-division standing. Topic 41: Border Control and Deaths. Same as Sociology 323D. Focus on enactment of border control policies, policy implementation and death patterns at the United States-Mexico border, patterns of unauthorized border crossings through dangerous border terrain, grassroots movements to support migrants and lessen deaths, and the ethics of coercive border control. Surveys the public sentiments and attitudes that support new border control policies, the patterns of migrant deaths in deserts and in the Rio Grande River associated with border control strategies, movements and community efforts to support migrants in the Arizona border area, and legal and ethical arguments and concepts that frame discussions of migrant deaths at the United States-Mexico border. Three lecture hours a week for one semester. Only one of the following may be counted: Mexican American Studies 374 (Topic: Border Control/Deaths), 374 (Topic 41), Sociology 321K (Topic: Border Control/Deaths), 323D. Additional prerequisite: Upper-division standing.

**Topic 42: United States Immigration.** Same as Sociology 322U. Utilizes a sociological perspective to gain an understanding of what social forces drive migration to the United States, how migrants organize their migration, and how immigration affects United States' society. Three lecture hours a week for one semester. Only one of the following may be counted: Mexican American Studies 374 (Topic: US Immigration), 374 (Topic 42), Sociology 321K (Topic: US Immigration), or 322U. Additional prerequisite: Upper-division standing.

#### MAS 375. Internship.

Restricted to Mexican American studies majors. Participate in a nonpartisan, direct-service capacity in a community, civic, or government organization or program that facilitates the economic, political, and social development of the Mexican American community. Write a report based on the internship project under the supervision of a faculty member. The equivalent of three lecture hours a week for one semester. Prerequisite: Consent of the internship coordinator.

# MAS 376. Mexican American and Latina/o Studies Community Reasearch and Analysis.

Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: Community Research & Analysis), Mexican American Studies 374 (Topic: Community Research & Analysis), 376. Prerequisite: Upper-division standing.

#### MAS 177. Mellon Mays Program Seminar.

Restricted to students accepted to the Mellon Mays Program. Seminar designed as an interdisciplinary primer to the exploration of research, writing, and professionalization in preparation for doctoral study. One lecture hour a week for one semester. May be repeated for credit. Offered on the pass/fail basis only. Prerequisite: Upper-division standing and consent of instructor.

#### MAS 378. Capstone Seminar.

Pursue in depth the research interests and methodological skills developed in other Mexican American and Latina/o Studies classes. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upper-division standing; Mexican American Studies 301; and 307 or 308 or 309.

#### MAS 679H. Honors Tutorial Course.

Restricted to Mexican American studies majors. Supervised research, readings, and writing of a substantial paper on a Mexican American studies topic. The equivalent of three lecture hours a week for two semesters. Prerequisite: For 679HA, Mexican American Studies 361, 362, or 372 with a grade of A; admission to the Mexican American Studies Honors Program no later than two semesters before expected graduation; a University grade point average of at least 3.00; and a grade point average in Mexican American studies of at least 3.50; for 679HB, Mexican American Studies 679HA.

# **Center for Middle Eastern Studies**

## Middle Eastern Studies: MES

#### **Lower-Division Courses**

# MES 301K. Introduction to the Middle East: Religious, Cultural, and Historical Foundations.

Same as History 306K and Religious Studies 314K. A survey of the history and civilization of the Middle East from the sixth to the fourteenth century. Three lecture hours a week for one semester. Only one of the following may be counted: History 306K, Middle Eastern Studies 301K, Religious Studies 314 (Topic: Intro M East: Rel/Cul/Hist Fnd), 314K.

# MES 301L. Introduction to the Middle East: Adjustment and Change in Modern Times.

Same as Government 314 (Topic 3) and History 306N (Topic 5). The responses of the societies of the Middle East and North Africa (Turkey, Iran, Afghanistan, Israel, and the Arab world) to Western cultural and political challenges, primarily since about 1800. Three lecture hours a week for one semester. Only one of the following may be counted: Government 314 (Topic 3), History 306N (Topic 5), Middle Eastern Studies 301L.

#### MES 310. Topics in Middle Eastern Studies.

Studies of areas and issues in the Middle East and North Africa. Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

**Topic 3: Introduction to the Old Testament.** Same as Core Texts and Ideas 305G, Jewish Studies 311 (Topic 4), and Religious Studies 313C. Introduction to the many interpretations of the Hebrew Bible (the Old Testament) and its meaning in the context of its historical and cultural setting in the ancient Near East. Three lecture hours a week for one semester. Only one of the following may be counted: Core Texts and Ideas 305G, 310 (Topic: Introduction to the Hebrew Bible), Jewish Studies 311 (Topic: Introduction to the Hebrew Bible), 311 (Topic 4), Middle Eastern Studies 310 (Topic: Introduction to the Hebrew Bible), 310 (Topic 3), Religious Studies 313 (Topic: Introduction to the Hebrew Bible), 313C.

**Topic 4: Social Transformation of Love and Relationships.** Same as Sociology 308L. Examination of the social, psychological, and spiritual perspectives toward the ideas of love and intimacy; how love and intimacy interact with rapid social, economic, and cultural change; and how the subsequent change transformed the social world and the meaning of love. Subjects include the aspects of self and identity; differentiation in the context of love in the modern age; the family and the individual; the impact of industrialization on private lives and the public order; gender, communication, love; intercultural love and intimacy; and personal choice and arranged marriages. Three lecture hours a week for one semester. Only one of the following may be counted: Middle Eastern Studies 310 (Topic: Social Transformation of Love and Relationships), 310 (Topic 4), Sociology 308 (Topic: Social Transformation of Love and Relationships), 308L.

**Topic 5: Introduction to Music in World Cultures.** Same as Music 303M. Exploration of practices, beliefs, and issues through the study of various musical genres in the regions of Asia, the Middle East, Africa, the Pacific, Europe, and the Americas. Three lecture hours a week for one semester, with additional hours to be arranged. Only one of the following may be counted: Asian Studies 303M, Middle Eastern Studies 310 (Topic: Introduction to Music In World Cultures), 310 (Topic 5), Music 303M.

**Topic 6: Jewish Civilization: Beginnings to 1492.** Same as History 306N (Topic 10), Jewish Studies 304M, and Religious Studies 313M. Introduction to the history, culture, and religion of the Jewish people from around 1000 BC to the end of the medieval period. Subjects may include ancient Israel, late Second Temple sectarianism, the rise of Christianity, rabbinic Judaism, medieval Jewish philosophy, Jewish mysticism, and Hebrew poetry. Three lecture hours a week for one semester. Only one of the following may be counted: History 306N (Topic: Jewish Civilization I), 306N (Topic 10), Jewish Studies 304M, 311 (Topic: Jewish Civilization I), Middle Eastern Studies 310 (Topic: Jewish Civilization I), 313M.

#### MES 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Middle Eastern Studies.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Middle Eastern Studies. University credit is awarded to work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### MES 127. Middle Eastern Cultural Exchange.

Provides an opportunity for students to interact with peer groups in Middle Eastern countries in which Arabic, Hebrew, Persian, and Turkish are spoken. Students engage in a variety of cultural activities and correspond with peer groups via blogs and Internet discussion forums. One lecture hour a week for one semester. Offered on the pass/fail basis only. Prerequisite: Upper-division standing.

#### MES 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Middle Eastern Studies.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Middle Eastern Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### MES 331C. History of the Ottoman Empire.

Same as History 331C. A survey of Ottoman society and culture and of the empire's place on the world scene. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

# MES 334C. Music Cultures of the Middle East, Past and Present.

Same as History 334C. A historical and ethnomusicological survey of the Arab, Turkish, and Persian music cultures. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### MES 341. Topics in the Middle East: Social Science.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 2: Business in Emerging Markets.** Same as International Business 373 and Latin American Studies 322 (Topic 9). Only one of the following may be counted: International Business 372 (Topic 2), 373, Latin American Studies 322 (Topic 9), Middle Eastern Studies 341 (Topic 2). Additional prerequisite: Upper-division standing. **Topic 3: The Cities of the Middle East.** Same as Anthropology 324L (Topic 51), Islamic Studies 373 (Topic 9), and Urban Studies 354 (Topic 15). Anthropological and sociological analysis of space, with a special emphasis on urban theory and culture in the Middle East. Only one of the following may be counted: Anthropology 324L (Topic: Cities of the Middle East), 324L (Topic 51), Islamic Studies 373 (Topic: Cities of the Middle East), 373 (Topic 9), Middle Eastern Studies 322K (Topic: Cities of the Middle East), 341 (Topic 3), Urban Studies 354 (Topic: Cities of the Middle East), 354 (Topic 15).

**Topic 4: Development Communication.** Same as Radio-Television-Film 342 (Topic 6). Middle Eastern Studies 341 (Topic 4) and Radio-Television-Film 342 (Topic 6) may not both be counted.

**Topic 5: Arab-Israeli Politics.** Same as Government 320L. In-depth study of domestic, regional, and international factors involved in politics in the Middle East, including simulation of diplomatic interaction in the Arab-Israeli conflict. Government 320L and Middle Eastern Studies 341 (Topic 5) may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 6: Negotiating Urbanization: Case Studies in Turkey.** Same as Urban Studies 354 (Topic 9). Examines local and transnational forces that have driven and continue to drive contemporary urbanization in Turkey. Focuses on key issues that emerge in rapidly growing cities of the developing world, such as growing income inequality and socioeconomic exclusion, environmental challenges, and rising violence. Only one of the following may be counted: Middle Eastern Studies 326 (Topic: Negotiating Urbanization in the Middle East: Case Studies in Turkey), 341 (Topic 6), Turkish 372 (Topic: Negotiating Urbanization in the Middle East: Case Studies in Turkey), Urban Studies 354 (Topic: Negotiating Urbanization in the Middle East: Case Studies in Turkey), 354 (Topic 9).

**Topic 7: Gender Politics in the Islamic World**. Same as Islamic Studies 373 (Topic 11), Religious Studies 358 (Topic 8), Sociology 336G, and Women's and Gender Studies 340 (Topic 44). Study of the Islamic world and major sociological concepts such as gender, social organizations, culture, and politics. Examines how culture is mediated by politics, resulting in diverse interpretations of Islam and in different policies with respect to women's rights. Three lecture hours a week for one semester. Only one of the following may be counted: Islamic Studies 373 (Topic: Gender Politics in the Islamic World), 373 (Topic 11), Middle Eastern Studies 322K (Topic: Gender Politics in the Islamic World), 341 (Topic: Gender Politics in the Islamic World), 341 (Topic 7), Religious Studies 358 (Topic: Gender Politics in the Islamic World), 358 (Topic 8), Sociology 321K (Topic: Gender Politics in the Islamic World), 336G, Women's and Gender Studies 340 (Topic: Gender Politics in the Islamic World), 340 (Topic 44). Additional prerequisite: Upper-division standing.

#### MES 342. Topics in the Middle East: Arts and Humanities.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 1: Introduction to Arabic Literature. Same as Comparative Literature 323 (Topic 13), Islamic Studies 373 (Topic 1), and Middle Eastern Languages and Cultures 321 (Topic 1). General survey of major themes, genres, and artists in the Arabic literary tradition from the sixth century to the modern era. Only one of the following may be counted: Comparative Literature 323 (Topic: Introduction to Arabic Literature), 323 (Topic 13), Islamic Studies 373 (Topic 1), Middle Eastern Languages and Cultures 321 (Topic 1), Middle Eastern Studies 342 (Topic 1). Additional prerequisite: Upper-division standing. Topic 2: Loyalty and Rebellion in Arabic Literature. Same as Islamic Studies 373 (Topic 2) and Middle Eastern Languages and Cultures 321 (Topic 2). Only one of the following may be counted: Islamic Studies 373 (Topic 2), Middle Eastern Languages and Cultures 321 (Topic 2),

**Topic 3: Memory and Identity in Ancient Arabia.** Same as Islamic Studies 373 (Topic 3) and Middle Eastern Languages and Cultures 321 (Topic 3). Only one of the following may be counted: Islamic Studies 373 (Topic 3), Middle Eastern Languages and Cultures 321 (Topic 3), Middle Eastern Studies 342 (Topic 3). Additional prerequisite: Upperdivision standing.

**Topic 4: The Arabian Nights.** Same as Islamic Studies 373 (Topic 4) and Middle Eastern Languages and Cultures 321 (Topic 4). Only one of the following may be counted: Comparative Literature 323 (Topic: The Arabian Nights), Middle Eastern Languages and Cultures 321 (Topic 4), Religious Studies 358 (Topic: The Arabian Nights), Women's and Gender Studies 340 (Topic: The Arabian Nights). Additional prerequisite: Upper-division standing.

Topic 5: Israel Through Its Literature. Same as Comparative Literature 323 (Topic 15), Jewish Studies 363 (Topic 17), and Middle Eastern Languages and Cultures 321 (Topic 5). Only one of the following may be counted: Comparative Literature 323 (Topic: Introduction to Israeli Literature), Comparative Literature 323 (Topic 15), English 322 (Topic: Introduction to Israeli Literature), Jewish Studies 363 (Topic 17), Middle Eastern Languages and Cultures 321 (Topic 5), Middle Eastern Studies 342 (Topic 5). Additional prerequisite: Upper-division standing. Topic 6: Love and the State in Contemporary Israeli Literature. Same as Jewish Studies 363 (Topic 7) and Middle Eastern Languages and Cultures 321 (Topic 6). Only one of the following may be counted: Comparative Literature 323 (Topic: Love and State in Contemporary Israeli Literature), English 322 (Topic: Love and State in Contemporary Israeli Literature), Jewish Studies 363 (Topic 7), Middle Eastern Languages and Cultures 321 (Topic 6), Middle Eastern Studies 342 (Topic 6), Women's and Gender Studies 340 (Topic: Love and State in Contemporary Israeli Literature). Additional prerequisite: Upperdivision standing.

**Topic 7: Postmodernist Israeli Literature.** Same as Jewish Studies 363 (Topic 19) and Middle Eastern Languages and Cultures 321 (Topic 7). Study of the first decades of Israeli literature. Themes include

the establishment of a new state in the aftermath of the Holocaust, conflict between Israel and Arab nations, and conflict between Israelis and Palestinians. Only one of the following may be counted: Comparative Literature 323 (Topic: Postmodernist Israeli Literature), English 322 (Topic: Postmodernist Israeli Literature), Jewish Studies 363 (Topic 19), Middle Eastern Languages and Cultures 321 (Topic 7), 342 (Topic 7). Additional prerequisite: Upper-division standing. Topic 8: The Sacred and the Secular in Contemporary Jewish Literature. Same as Jewish Studies 363 (Topic 10), Middle Eastern Languages and Cultures 321 (Topic 8), and Religious Studies 353 (Topic 3). Only one of the following may be counted: Comparative Literature 323 (Topic: The Sacred and the Secular in Contemporary Jewish Literature), English 322 (Topic: The Sacred and the Secular in Contemporary Jewish Literature), Jewish Studies 363 (Topic 10), Middle Eastern Languages and Cultures 321 (Topic 8), Middle Eastern Studies 342 (Topic 8), Religious Studies 353 (Topic: The Sacred

Additional prerequisite: Upper-division standing. **Topic 9: Mizrahi Writing in Israel.** Same as Hebrew 346 (Topic 9) and Jewish Studies 363 (Topic 8). Only one of the following may be counted: Hebrew 346 (Topic 9), Jewish 363 (Topic 8), Middle Eastern Studies 342 (Topic 9). Additional prerequisite: Upper-division standing, and Hebrew 412L (or 312L) or 320L with a grade of at least C. **Topic 10: Persian Literature, Past and Present.** Same as Middle Eastern Languages and Cultures 321 (Topic 10). Middle Eastern Languages and Cultures 321 (Topic 10) and Middle Eastern Studies 342 (Topic 10) may not both be counted. Additional prerequisite:

and the Secular in Contemporary Jewish Literature), 353 (Topic 3).

**Topic 11: Iranian Women Writers.** Same as Middle Eastern Languages and Cultures 321 (Topic 11) and Women's and Gender Studies 340 (Topic 10). Only one of the following may be counted: Middle Eastern Languages and Cultures 321 (Topic 11), Middle Eastern Studies 342 (Topic 11), WGS 340 (Topic 10). Additional prerequisite: Upper-division standing.

Upper-division standing.

**Topic 12: Images of the West and Westerners in Persian Fiction.** Same as Middle Eastern Languages and Cultures 321 (Topic 12). Middle Eastern Languages and Cultures 321 (Topic 12) and Middle Eastern Studies 342 (Topic 12) may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 13: Iranian Literature in Exile.** Same as Middle Eastern Languages and Cultures 321 (Topic 13). Middle Eastern Languages and Cultures 321 (Topic 13) and Middle Eastern Studies 342 (Topic 13) may not both be counted. Additional prerequisite: Upper-division standing.

Topic 14: Iranian Film and Fiction. Same as Middle Eastern Languages and Cultures 321 (Topic 14). Middle Eastern Languages and Cultures 321 (Topic 14) and Middle Eastern Studies 342 (Topic 14) may not both be counted. Additional prerequisite: Upper-division standing. Topic 15: Classical Islamic Studies. Same as Islamic Studies 340 (Topic 3), Middle Eastern Languages and Cultures 321 (Topic 15), and Religious Studies 358 (Topic 10). Only one of the following may be counted: Islamic Studies 340 (Topic 3), Middle Eastern Languages and Cultures 321 (Topic 15), Middle Eastern Studies 342 (Topic 15), Religious Studies 358 (Topic: Classical Islamic Studies), Religious Studies 358 (Topic 10). Additional prerequisite: Upper-division standing.

**Topic 16: The Qur'an.** Same as Comparative Literature 323 (Topic 37), Core Texts and Ideas 375 (Topic 1), Islamic Studies 340 (Topic 2), Middle Eastern Languages and Cultures 321 (Topic 9), Religious Studies 325G, and Women's and Gender Studies 340 (Topic 54). The history, language, style, and themes of the Qur'an. Only one of the following may be counted: Comparative Literature 323 (Topic: The Qur'an), 323 (Topic 37), Core Texts and Ideas 375 (Topic: The Qur'an), Core Texts and Ideas 375 (Topic 1), Islamic Studies 340 (Topic 2), Middle Eastern Languages and Cultures 321 (Topic 9), Middle

Eastern Studies 342 (Topic 16), Religious Studies 325G, Women's and Gender Studies 340 (Topic: The Qur'an), 340 (Topic 54). Additional prerequisite: Upper-division standing.

Topic 17: Envisioning Muslims: The Middle Ages and Today. Same as English 360S (Topic 3). Covers the representation of Muslims in the dominant cultural media of the European Middle Ages and in the contemporary world of the twentieth and twenty-first centuries. Modern cultural media includes film and digital visual media. Readings are selected to show how Europeans envisioned Muslims, and how Muslims envisioned themselves. Only one of the following may be counted: English 360S (Topic 3), Islamic Studies 372 (Topic: Envisioning Muslims), Middle Eastern Studies 342 (Topic 17). Additional prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

Topic 18: Saracens in Medieval Literature. Same as English 350E (Topic 2). Muslims, Arabs, Turks, Persians, Berbers, and Moors were often identified in literature and historical texts under the invented group name Saracens. Course explores who, and what, a Saracen is. Includes selected readings of literature, historical documents, and critical scholarship on Saracens in European medieval romances and epics, crusade literature, travel narratives, maps, and polemical treatises. For critical contrast, readings also include Islamic texts on, or by some of the most famous (or infamous) Saracens known to medieval Europe. English 350E (Topic 2) and Middle Eastern Studies 342 (Topic 18) may not both be counted. Additional prerequisite: Nine semester hours of coursework in English or rhetoric and writing. Topic 19: Self-Revelation in Women's Writing. Same as African and African Diaspora Studies 372E (Topic 8), Comparative Literature 323 (Topic 4), and Women's and Gender Studies 340 (Topic 14). Only one of the following may be counted: African and African Diaspora Studies 372E (Topic 8), 374 (Topic 26), Comparative Literature 323 (Topic 4), English 322 (Topic: Self-Revelation in Women's Writing), Middle Eastern Studies 342 (Topic 19), Women's and Gender Studies 340 (Topic 14).

**Topic 20: Autobiography: A Modern Literary Species.** Same as Comparative Literature 323 (Topic 3). Only one of the following may be counted: African and African Diaspora Studies 374 (Topic 25), Comparative Literature 323 (Topic 3), Middle Eastern Studies 342 (Topic 20), Women's and Gender Studies 340 (Topic: Autobiography: A Modern Literary Species). Additional prerequisite: Upper-division standing.

Topic 21: Rome and Jerusalem. Same as Ancient History and Classical Civilization 325 (Topic 3), History 321G, Jewish Studies 365 (Topic 7), and Religious Studies 365 (Topic 1). A study of daily life in Israel during the Roman period, focusing on Jerusalem, ancient Palestinian synagogues and churches, Jewish and Christian symbolism, agriculture, warfare, and burial practices. Three lecture hours a week for one semester. Only one of the following may be counted: Ancient History and Classical Civilization 325 (Topic 3), Classical Civilization 348 (Topic: Rome and Jerusalem), History 321G, Jewish Studies 365 (Topic 7), Middle Eastern Studies 342 (Topic 21), Religious Studies 365 (Topic 1), Urban Studies 353 (Topic: Rome and Jerusalem). Additional prerequisite: Upper-division standing. Topic 22: Biblical Archaeology. Only one of the following may be counted: Anthropology 324L (Topic: Biblical Archaeology), History 364G (Topic: Biblical Archaeology), Jewish Studies 361 (Topic: Biblical Archaeology), Middle Eastern Studies 342 (Topic 22), Religious Studies 353 (Topic: Biblical Archaeology). Prerequisite: Upper-division standing.

**Topic 23: The Dead Sea Scrolls.** Same as Ancient History and Classical Civilization 330 (Topic 1), History 364G (Topic 3), Jewish Studies 364 (Topic 4), Middle Eastern Languages and Cultures 321 (Topic 17), and Religious Studies 353D. Three lecture hours a week for one semester. Only one of the following may be counted: Ancient History and Classical Civilization 330 (Topic: The Dead Sea Scrolls),

330 (Topic 1), History 364G (Topic 3), Jewish Studies 364 (Topic 4), Middle Eastern Languages and Cultures 321 (Topic 17), 342 (Topic 23), Religious Studies 353D. Additional prerequisite: Upper-division standing.

**Topic 24: Sufism and Islamic Mysticism.** Same as Asian Studies 340 (Topic 8), Islamic Studies 340 (Topic 4), and Religious Studies 358 (Topic 4). Muslim debates of Sufism; the historical development of Sufi beliefs regarding theology, religious laws, expression, and popular social practices. Only one of the following may be counted: Asian Studies 340 (Topic: Sufism and Islamic Mysticism), Asian Studies 340 (Topic 8), History 364G (Topic: Sufism and Islamic Mysticism), Islamic Studies 340 (Topic 4), Middle Eastern Studies 320 (Topic 16: Sufism: Islamic Mysticism and Spirituality), 342 (Topic 24), Religious Studies 341 (Topic: Sufism and Islamic Mysticism), 358 (Topic 4). Additional prerequisite: Upper-division standing.

**Topic 25: Politics of Court Literature.** Same as Arabic 360L (Topic 3) and Islamic Studies 373 (Topic 6). Only one of the following may be counted: Arabic 360L (Topic 3), Comparative Literature 323 (Topic: Politics of Court Literature), Islamic Studies 373 (Topic 6), Middle Eastern Studies 342 (Topic 25). Additional prerequisite: Upper-division standing; Arabic 120D and 420L with a grade of at least C in each, or Arabic 531L with a grade of at least C.

**Topic 26: Arab Women Poets.** Same as Arabic 360L (Topic 2) and Islamic Studies 373 (Topic 7). Only one of the following may be counted: Arabic 360L (Topic 2), Comparative Literature 323 (Topic: Arab Women Poets), Islamic Studies 373 (Topic 7), Middle Eastern Studies 342 (Topic 26). Additional prerequisite: Upper-division standing, and Arabic 420L with a grade of at least C in each, or Arabic 531L with a grade of at least C.

**Topic 27: Islamic Law.** Same as Islamic Studies 340 (Topic 5), Middle Eastern Languages and Cultures 321 (Topic 19), Religious Studies 358 (Topic 9), and Women's and Gender Studies 340 (Topic 27). Designed to give students a foundation in the substantive teachings of the shariah, which comprises not only what we normally think of as law, but also ethics and etiquette. Only one of the following may be counted: Islamic Studies 340 (Topic: Islamic Law), 340 (Topic 5), Middle Eastern Languages and Cultures 321 (Topic: Islamic Law), 321 (Topic 19), Middle Eastern Studies 342 (Topic 27), Religious Studies 358 (Topic: Islamic Law), 358 (Topic 9), Women's and Gender Studies 340 (Topic: Islamic Law), 340 (Topic 27).

Topic 28: Gender in North and West Africa. Same as African and African Diaspora Studies 372G (Topic 5), Islamic Studies 373 (Topic 8), Middle Eastern Languages and Cultures 321 (Topic 16), and Women's and Gender Studies 340 (Topic 34). Examines gender discourses through North African and West African literary works by looking at the role(s) played by Islam and Christianity in the creation of the identities of African men and women. Includes discussion of the question of what gender is, and whether it is socially constructed. Only one of the following may be counted: African and African Diaspora Studies 372G (Topic 5), 374C (Topic: Gender in North and West Africa), Islamic Studies 372 (Topic: Gender in North and West Africa), 373 (Topic 8), Middle Eastern Languages and Cultures 321 (Topic 16), Middle Eastern Studies 342 (Topic 28), Women's and Gender Studies 340 (Topic: Gender in North and West Africa), 340 (Topic 34). Additional prerequisite: Upper-division standing. Topic 29: In Search of King David. Same as Jewish Studies 363 (Topic 20), Middle Eastern Languages and Cultures 321 (Topic 18), and Religious Studies 365 (Topic 3). Only one of the following may be counted: Jewish Studies 363 (Topic: In Search of King David), 363 (Topic 20), Middle Eastern Languages and Cultures 321 (Topic: In Search of King David), 321 (Topic 18), Middle Eastern Studies 342 (Topic: In Search of King David), 342 (Topic 29), Religious Studies 365 (Topic: In Search of King David), 365 (Topic 3). Prerequisite: Upperdivision standing.

**Topic 30: Iranian Culture.** Same as Islamic Studies 373 (Topic 10) and Middle Eastern Languages and Cultures 321 (Topic 20). Only one of the following may be counted: Islamic Studies 373 (Topic: Iranian Culture), Islamic Studies 373 (Topic 10), Middle Eastern Languages and Culture 321 (Topic: Iranian Culture), Middle Eastern Languages and Cultures (Topic 20), Middle Eastern Studies 342 (Topic: Iranian Culture), Middle Eastern Studies 342 (Topic: Iranian Culture), Middle Eastern Studies 342 (Topic: Iranian Culture), Additional prerequisite: Upper-division standing.

Topic 31: Palestine and the Palestinians: A Journey Through Time.

Same as Middle Eastern Languages and Cultures 321 (Topic 21). Three lecture hours per week for one semester. Only one of the following may be counted: Arabic 360L (Topic: Palestine and the Palestinians), 360L (Topic 10), Middle Eastern Languages and Cultures 321 (Topic 21), Middle Eastern Studies 342 (Topic 31). Additional prerequisite: Upper-division standing.

**Topic 32: Women Filmmakers in the Middle East.** Same as Middle Eastern Languages and Cultures 321 (Topic 23) and Women's and Gender Studies 340 (Topic 55). Only one of the following may be counted: Middle Eastern Languages and Cultures 321 (Topic 23), Middle Eastern Studies 322K (Topic: Women Filmmakers in the Middle East), 342 (Topic 32), Turkish 372 (Topic: Women Filmmakers in the Middle East), Women's and Gender Studies 340 (Topic: Women Filmmakers in the Middle East), 340 (Topic 55). Additional prerequisite: Upper-division standing.

Topic 33: Love in the East and West. Same as Comparative Literature 323 (Topic 36), Core Texts and Ideas 345 (Topic 10), and Middle Eastern Languages and Cultures 321 (Topic 25). Three lecture hours a week for one semester. Only one of the following may be counted: Comparative Literature 323 (Topic: Love in the East and West), Comparative Literature 323 (Topic 36), Core Texts and Ideas 345 (Topic: Love in the East and West), Core Texts and Ideas 345 (Topic 10), Middle Eastern Languages and Cultures 321 (Topic: Love in the East and West), Middle Eastern Languages and Cultures 321 (Topic 25), Middle Eastern Studies 321K (Topic: Love in the East and West), Middle Eastern Studies 342 (Topic 33), Turkish 372 (Topic: Love in the East and West). Additional prerequisite: Upper-division standing. Topic 34: The Religions of the Middle East. Same as Islamic Studies 340 (Topic 6), Middle Eastern Languages and Cultures 321 (Topic 26), and Religious Studies 358 (Topic 15). Three lecture hours per week for one semester. Only one of the following may be counted: Islamic Studies 340 (Topic: Religions of the Middle East), 340 (Topic 6), Middle Eastern Languages and Cultures 321 (Topic 26), Middle Eastern Studies 322K (Topic: Religions of the Middle East), 342 (Topic 34), Religious Studies 358 (Topic: Religions of the Middle East), 358 (Topic 15). Additional prerequisite: Upper-division standing. Topic 35: Islamic Theology. Same as Core Texts and Ideas 375 (Topic 2). Islamic Studies 340 (Topic 7). Middle Eastern Languages and Cultures 321 (Topic 27), and Religious Studies 358 (Topic 14). Three lecture hours per week for one semester. Only one of the following may be counted: Core Texts and Ideas 375 (Topic: Islamic Theology), 375 (Topic 2), Islamic Studies 340 (Topic: Islamic Theology), 340 (Topic 7), Middle Eastern Languages and Cultures 321 (Topic: Islamic Theology), 321 (Topic: 27), Middle Eastern Studies 321K (Topic: Islamic Theology), 342 (Topic: Islamic Theology), 342 (Topic 35), Religious Studies 358 (Topic: Islamic Theology), 358 (Topic 14). Additional prerequisite: Upper-division standing.

Topic 36: Rumi and the Persian Sufi Tradition. Same as Islamic Studies 373 (Topic 12) and Middle Eastern Languages and Cultures 321 (Topic 28). Only one of the following may be counted: Comparative Literature 323 (Topic: Rumi & Persian Sufi Tradition), Islamic Studies 372 (Topic: Rumi & Persian Sufi Tradition), Islamic Studies 373 (Topic: Rumi & Persian Sufi Tradition), Islamic Studies 373 (Topic 12), Middle Eastern Languages and Cultures 321 (Topic: Rumi & Persian Sufi Tradition), Middle Eastern Languages and Cultures 321 (Topic 28), Middle Eastern Studies 321K (Topic: Rumi & Persian Sufi Tradition), Middle Eastern Studies 342 (Topic: Rumi & Persian Sufi Tradition), Middle Eastern Studies 342 (Topic 36), Persian 361 (Topic: Rumi & Persian Sufi Tradition), Religious Studies 358 (Topic: Rumi & Persian Sufi Tradition). Additional prerequisite: Upperdivision standing.

**Topic 37: Biblical Prophecy.** Same as Middle Eastern Languages and Cultures 321 (Topic 24). Only one of the following may be counted: Hebrew 374 (Topic: Biblical Prophecy), Middle Eastern Languages and Cultures 321 (Topic 24), Middle Eastern Studies 320 (Topic: Biblical Prophecy), 342 (Topic 37), Religious Studies 353 (Topic: Biblical Prophecy).

Topic 38: Comparative Jewish Literature: Israel, France, and the United States. Same as Jewish Studies 363 (Topic 22) and Middle Eastern Languages and Cultures 321 (Topic 38). Only one of the following may be counted: Comparative Literature 323 (Topic: The Sacred and the Secular in Contemporary Jewish Literature), English 322 (Topic: The Sacred and the Secular in Contemporary Jewish Literature), Jewish Studies 363 (Topic 10), 363 (Topic 22), Middle Eastern Languages and Cultures 321 (Topic 8), 321 (Topic 38), Middle Eastern Studies 342 (Topic 8), 342 (Topic 38), Religious Studies 353 (Topic: The Sacred and the Secular in Contemporary Jewish Literature), 353 (Topic 3). Additional prerequisite: Upper-division standing.

**Topic 39: The Middle East in World Poetry.** Same as Islamic Studies 373 (Topic 14) and Middle Eastern Languages and Cultures 321 (Topic 30). Three lecture hours a week for one semester. Only one of the following may be counted: Comparative Literature 323 (Topic: Middle East in World Poetry), Islamic Studies 373 (Topic: Middle East in World Poetry), 373 (Topic 14), Middle Eastern Languages and Cultures 321 (Topic: Middle East in World Poetry), 321 (Topic 30), Middle Eastern Studies 342 (Topic: Middle East in World Poetry), 342 (Topic 39). Additional prerequisite: Upper-division standing.

**Topic 40: Gender and Art in the Muslim World.** Same as Asian Studies 372 (Topic 46), Islamic Studies 373 (Topic 15), Middle Eastern Languages and Cultures 321 (Topic 31), Religious Studies 358 (Topic 20), and Women's and Gender Studies 340 (Topic 62). Only one of the following may be counted: Asian Studies 372 (Topic: Gender and Art in Muslim World), 372 (Topic 46), Islamic Studies 373 (Topic: Gender and Art in Muslim World), 372 (Topic 46), Islamic Studies 373 (Topic: Gender and Art in Muslim World), 373 (Topic 15), Middle Eastern Languages and Cultures 321 (Topic: Gender and Art in Muslim World), 321 (Topic 31), Middle Eastern Studies 342 (Topic: Gender and Art in Muslim World), 342 (Topic 40), Religious Studies 358 (Topic: Gender and Art in Muslim World), 358 (Topic 20), Women's and Gender Studies 340 (Topic: Gender and Art in Muslim World), 340 (Topic 62). Prerequisite: Upper-division standing.

**Topic 42: Archaeology of Greek Prehistory.** Same as Ancient History and Classical Civilization 325 (Topic 8), Classical Civilization 340 (Topic 8), and Middle Eastern Languages and Cultures 321 (Topic 33). Explores the development of complex societies in ancient Greece by studying its prehistory through archaeology. Only one of the following may be counted: Ancient History and Classical Civilization 325 (Topic: Archaeology of Greek Prehistory), 325 (Topic 8), Classical Civilization 340 (Topic: Archaeology of Greek Prehistory), 340 (Topic 8), Middle Eastern Languages and Cultures 321 (Topic: Archaeology of Greek Prehistory), 321 (Topic 33), Middle Eastern Studies 320 (Topic: Archaeology of Greek Prehistory), 342 (Topic: Archaeology of Greek Prehistory), 342 (Topic 42), Persian 372 (Topic: Archaeology of Greek Prehistory).

**Topic 43: Persian Art: Past and Present.** Same as Islamic Studies 373 (Topic 16) and Middle Eastern Languages and Cultures 321 (Topic 35). Only one of the following may be counted: Islamic Studies 373 (Topic: Persian Art: Past and Present), 373 (Topic 16), Middle Eastern Languages and Cultures 321 (Topic: Persian Art: Past and Present), 321 (Topic 35), Middle Eastern Studies 342 (Topic: Persian Art: Past and Present), 342 (Topic 43). Prerequisite: Upper-division standing.

**Topic 44: Graffiti and Poster Art in the Islamic World.** Same as Anthropology 324L (Topic 59), Islamic Studies 373 (Topic 17), Middle Eastern Languages and Cultures 321 (Topic 36), Religious Studies 358 (Topic 21), and Women's and Gender Studies 340 (Topic 67). Only one of the following may be counted: Anthropology 324L (Topic: Graffiti/Poster Art: Islam World), 324L (Topic 59), Islamic Studies 373 (Topic: Graffiti/Poster Art: Islam World), 373 (Topic 17), Middle Eastern Languages and Cultures 321 (Topic: Graffiti/Poster Art: Islam World), 321 (Topic 36), Middle Eastern Studies 342 (Topic: Graffiti/ Poster Art: Islam World), 342 (Topic 44), Religious Studies 358 (Topic: Graffiti/Poster Art: Islam World), 358 (Topic 21), Women's and Gender Studies 340 (Topic: Graffiti/Poster Art: Islam World), 340 (Topic 67). Prerequisite: Upper-division standing.

**Topic 45: Lost Languages and Decipherment.** Same as Ancient History and Classical Civilization 330 (Topic 4), Classical Civilization 348 (Topic 21), and Middle Eastern Languages and Cultures 321 (Topic 37). Only one of the following may be counted: Ancient History and Classical Civilization 330 (Topic: Lost Languages & Decipherment), 330 (Topic 4), Classical Civilization 348 (Topic: Lost Languages & Decipherment), 348 (Topic 21), Linguistics 350 (Topic: Lost Languages & Decipherment), Middle Eastern Languages and Cultures 321 (Topic: Lost Languages & Decipherment), 321 (Topic 37), Middle Eastern Studies 342 (Topic: Lost Languages & Decipherment), 342 (Topic 45). Prerequisite: Upper-division standing.

#### MES 343. Topics in the Middle East: History.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 1: Modern Egypt: A History. Same as History 334E and Islamic Studies 373 (Topic 5). Critically examines the social, political, and intellectual dynamics that shaped the different forms of political community, economic organization, and public culture over the past century. Covers colonialism, liberalism, Arab socialism, authoritarian capitalism, and Islamic republicanism. Three lecture hours a week for one semester. Only one of the following may be counted: History 334E, History 364G (Topic: Modern Egypt: A History), Islamic Studies 372 (Topic: Modern Egypt: A History), 373 (Topic 5), Middle Eastern Studies 343 (Topic 1). Additional prerequisite: Upper-division standing. Topic 2: Re-forming the Arab East, 1914-Present. Same as History 331R. Introduction to the history of the Middle East in the twentieth century. Examines forces that transformed the area from a relatively peaceful region to a radicalized environment. Explores colonialism, nationalism, secular modernism, impact of Zionism, rise of political Islam, status of women, and the oil revolution. Only one of the following may be counted: History 331R, History 364G (Topic: Re-forming the Arab East), Middle Eastern Studies 343 (Topic 2). Additional prerequisite: Upper-division standing.

**Topic 3: History of Iran to 1800.** Same as History 331G. A survey of the social, economic, and religious components unique to Iran from the pre-Islamic empire of the Achaemenids through the development of Iran as a medieval and premodern Islamic state. History 331G and Middle Eastern Studies 343 (Topic 3) may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 4: Islamic Spain and North Africa to 1492.** Same as History 375D and Religious Studies 345. An introduction to the impact of Islam on Spain and North Africa, with emphasis on social, economic, and cultural development. Only one of the following may be counted: Ancient History and Classical Civilization 330 (Topic: Islamic Spain and North Africa to 1492), History 375D, Islamic Studies 373 (Topic: Islamic Spain and North Africa to 1492), Middle Eastern Studies 343 (Topic 4), Religious Studies 345, 363 (Topic: Islamic Spain and North Africa to 1492). Additional prerequisite: Upper-division standing. **Topic 5: Medieval Islam: Faith and History.** Same as History 350L (Topic 34) and Religious Studies 358 (Topic 2). Only one of the

following may be counted: History 350L (Topic 34), Middle Eastern Studies 343 (Topic 5), Religious Studies 358 (Topic 2). Additional prerequisite: Upper-division standing.

**Topic 6: Modern Iran.** Same as History 331L. The development of modern Iran; special attention is given to the impact of the West, the constitutional movement, nationalism, the oil crisis, and the Islamic Revolution of 1979. History 331L and Middle Eastern Studies 343 (Topic 6) may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 7: History of the Pilgrimage to Mecca, Hajj.** Same as History 364G (Topic 14) and Religious Studies 358 (Topic 24). Survey of the Hajj, Islam's major pilgrimage to Mecca and the nearby Holy Places. It will examine the Islamic pilgrimage from its beginnings in the seventh century C.E. through today. Three lecture hours a week for one semester. Only one of the following may be counted: History 364G (Topic: History of the Pilgrimage to Mecca, Hajj), 364G (Topic 14), Middle Eastern Studies 343 (Topic: History of the Pilgrimage to Mecca, Hajj), 343 (Topic 7), Religious Studies 358 (Topic: History of the Pilgrimage to Mecca, Hajj), 358 (Topic 24).

#### MES 351. Mediterranean Crossroads Seminar.

Reading and discussion about the lands, cultures, and societies of the eastern Mediterranean from a variety of disciplinary perspectives. Students prepare to study in the Middle East (in Middle Eastern Studies 352) and begin work on their individual research projects. Three lecture hours a week for one semester. Offered in the spring semester only. Prerequisite: Upper-division standing and consent of instructor.

#### MES 352. Mediterranean Crossroads Study Abroad Seminar.

Students study and conduct research in the Middle East. The equivalent of three lecture hours a week for one semester. Offered in the summer session only. Prerequisite: Middle Eastern Studies 351.

#### MES 353. Mediterranean Crossroads Conference Course.

Under supervision of a faculty member, students complete their research projects following participation in Middle Eastern Studies 352. Conference course. Offered in the fall semester only. Prerequisite: Middle Eastern Studies 352.

#### MES 360. Conference Course.

Supervised individual research, discussion, and writing of papers about various general and specialized Middle Eastern subjects. Conference course. May be repeated for credit. Prerequisite: Upper-division standing and consent of instructor.

# MES 370. Practicum: Internships in Applied Middle Eastern Studies.

Research and staff experience working in an appropriate agency or business. At least six but no more than nine hours of work a week for one semester. May not be repeated for credit. Prerequisite: Completion of at least seventy semester hours of coursework, including twelve hours of Middle Eastern studies, and consent of the undergraduate adviser.

#### MES 679H. Honors Tutorial Course.

Supervised individual reading for one semester, followed by research and writing to produce a substantial paper on a special topic in middle eastern studies, to be completed during the second semester. Conference course for two semesters. Prerequisite: For 679HA, admission to the Middle Eastern Studies Honors Program; for 679HB, Middle Eastern Studies 679HA.

# Department of Middle Eastern Studies

Before enrolling for the first time in any language offered by the Department of Middle Eastern Studies, all students with knowledge of the language, however acquired, must be tested to determine the course for which they should register. Information about the tests is available from the departmental undergraduate adviser. The Department of Middle Eastern Studies considers students educated in a Middle Eastern language beyond the elementary school level to be native speakers of that language.

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

# Arabic: ARA

### **Lower-Division Courses**

#### ARA 601C. Intensive Arabic I.

Not open to native speakers of Arabic. First semester of intensive Arabic language instruction. Six lecture hours a week for one semester. Only one of the following may be counted: Arabic 601C, 506, 508. Arabic 601C and 106C may not both be counted.

#### ARA 305. Arabic Tutorial.

The basics of the Arabic language. Individual instruction. May not be used to fulfill the foreign language requirement for any bachelor's degree. Prerequisite: Consent of the faculty coordinator.

#### ARA 506 (TCCN: ARAB 1511). First-Year Arabic I.

Not open to native speakers of Arabic. First semester of Arabic language instruction. Five lecture hours a week for one semester. Only one of the following may be counted: Arabic 601C, 506, 508. Prerequisite: Credit or registration for Arabic 106C.

#### ARA 106C. Conversation for First-Year Arabic I.

Not open to native speakers of Arabic. One lecture hour a week for one semester. Arabic 601C and 106C may not both be counted. Prerequisite: Credit or registration for Arabic 506.

#### ARA 507 (TCCN: ARAB 1512). First-Year Arabic II.

Not open to native speakers of Arabic. Continuation of Arabic 506. Five lecture hours a week for one semester. Only one of the following may be counted: Arabic 507, 509, 611C. Prerequisite: Arabic 506 and 106C with a grade of at least C in each, and credit or registration for Arabic 107C.

#### ARA 107C. Conversation for First-Year Arabic II.

Not open to native speakers of Arabic. One lecture hour a week for one semester. Arabic 107C and 611C may not both be counted. Prerequisite: Arabic 506 and 106C with a grade of at least C in each, and credit or registration for Arabic 507.

#### ARA 508. Modern Standard Arabic I.

Designed to provide students with basic competence in Modern Standard Arabic, targeting the skills of speaking, reading, writing, and listening. Five lecture hours a week for one semester. Only one of the following may be counted: Arabic 601C, 506, 508.

#### ARA 509. Modern Standard Arabic II.

Continuation of Arabic 508. Five lecture hours a week for one semester. Only one of the following may be counted: Arabic 507, 509, 611C. Prerequisite: Arabic 508 with a grade of at least C.

#### ARA 611C. Intensive Arabic II.

Not open to native speakers of Arabic. Six lecture hours a week for one semester. Arabic 611C and 512K may not both be counted. If taken in residence, only one of the following may be counted: Arabic 507, 509, 611C. If taken in residence, Arabic 107C and 611C may not both be counted. Prerequisite: Arabic 601C with a grade of at least C.

#### ARA 112C. Conversation for Second-Year Arabic I.

Not open to native speakers of Arabic. One lecture hour a week for one semester. Arabic 112C and 621K may not both be counted. Prerequisite: Arabic 507 and 107C with a grade of at least C in each, and credit or registration for Arabic 512K.

#### ARA 112D. Conversation for Second-Year Arabic II.

Not open to native speakers of Arabic. One lecture hour a week for one semester. Arabic 112D and 621L may not both be counted. Prerequisite: Arabic 112C and 512K with a grade of at least C in each, and credit or registration for Arabic 512L.

#### ARA 512K. Second-Year Arabic I.

Not open to native speakers of Arabic. Five lecture hours a week for one semester. Arabic 512K and 621K may not both be counted. Prerequisite: Arabic 507 and 107C with a grade of at least C in each, and credit or registration for Arabic 112C.

#### ARA 512L. Second-Year Arabic II.

Not open to native speakers of Arabic. Continuation of Arabic 512K. Five lecture hours a week for one semester. Arabic 512L and 621L may not both be counted. Prerequisite: Arabic 112C and 512K with a grade of at least C in each, and credit or registration for Arabic 112D.

#### ARA 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Arabic.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Middle Eastern Studies. University credit is awarded for work in an exchange program; it may be counted as coursework counted in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

## **Upper-Division Courses**

#### ARA 321. Introduction to Arabic Dialects.

Introduction to Arabic as spoken throughout the Arab world. Three lecture hours a week for one semester.

#### ARA 621K. Intensive Arabic III.

Not open to native speakers of Arabic. Six lecture hours a week for one semester. If taken in residence, only one of the following may be counted: Arabic 512K, 621K. Arabic 112C and 621K may not both be counted. Prerequisite: Arabic 611C with a grade of at least C.

#### ARA 621L. Intensive Arabic IV.

Not open to native speakers of Arabic. Six lecture hours a week for one semester. If taken in residence, only one of the following may be counted: Arabic 512L, 621L. Arabic 112D and 621L may not both be counted. Prerequisite: Arabic 621K with a grade of at least C.

#### ARA 322K. Levantine Arabic.

Not open to native speakers of Arabic. Three lecture hours a week for one semester. Prerequisite: Arabic 512L or 621L with a grade of at least C.

#### ARA 325K. Egyptian Arabic.

Not open to native speakers of Arabic. Introduction to the Egyptian dialect of Arabic. Three lecture hours a week for one semester. Prerequisite: Arabic 512L or 621L with a grade of at least C.

#### ARA 327K. Advanced Spoken Media Arabic I.

Development of the specialized vocabulary and skills needed in the media or public policy sectors of the Arab-speaking world. Three lecture hours a week for one semester. Prerequisite: Arabic 531L with a grade of at least B-.

#### ARA 327L. Advanced Spoken Media Arabic II.

Development of the specialized vocabulary and skills needed in the media or public policy sectors of the Arab-speaking world. Three lecture hours a week for one semester. Prerequisite: Arabic 327K with a grade of at least B-.

# ARA 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Arabic.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Middle Eastern Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### ARA 130D. Arabic across Disciplines.

Students read and discuss Arabic language materials related to the subject matter of another designated course. One lecture hour a week for one semester. No more than three semester hours may be counted toward the major in either Middle Eastern Studies or Middle Eastern Languages and Culture. May be repeated for credit. Prerequisite: Upperdivision standing and consent of instructor.

#### ARA 531K. Intensive Arabic V.

Not open to native speakers of Arabic. Five lecture hours a week for one semester. Prerequisite: Arabic 112D and 512L with a grade of at least C in each, or Arabic 621L with a grade of at least C.

#### ARA 531L. Intensive Arabic VI.

Not open to native speakers of Arabic. Sixth semester of intensive Arabic language instruction. Five lecture hours a week for one semester. Prerequisite: Arabic 531K with a grade of at least C.

# ARA 360L. Topics in Arabic Language, Literature, and Culture.

Close textual study of prose or poetry in Arabic. Some topics may focus on the cultural impact of literature and language. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Arabic 531L with a grade of at least C.

**Topic 2: Arab Women Poets.** Same as Islamic Studies 373 (Topic 7) and Middle Eastern Studies 342 (Topic 26). Only one of the following may be counted: Arabic 360L (Topic 2), Comparative Literature 323 (Topic: Arab Women Poets), Islamic Studies 373 (Topic 7), Middle Eastern Studies 342 (Topic 26). Additional prerequisite: Upper-division standing, and Arabic 420L with a grade of at least C in each, or Arabic 531L with a grade of at least C.

**Topic 3: Politics of Court Literature.** Same as Islamic Studies 373 (Topic 6) and Middle Eastern Studies 342 (Topic 25). Only one of

the following may be counted: Arabic 360L (Topic 3), Comparative Literature 323 (Topic: Politics of Court Literature), Islamic Studies 373 (Topic 6), Middle Eastern Studies 342 (Topic 25). Additional prerequisite: Upper-division standing; Arabic 120D and 420L with a grade of at least C in each, or Arabic 531L with a grade of at least C. **Topic 4: Translating Arabic Texts.** Only one of the following may be counted: Arabic 360L (Topic 4), 380C (Topic 8: Translating Arabic Texts), Middle Eastern Studies 381 (Topic 39: Translating Arabic Texts).

**Topic 5: Egyptian Culture and Society.** Arabic 360L (Topic: Egyptian Culture and Society) and 360L (Topic 5) may not both be counted. **Topic 6: Arab Political Speeches in War and Peace.** Arabic 360L (Topic: Arab Political Speeches in War and Peace) and 360L (Topic 6) may not both be counted.

**Topic 7: The Arab Spring.** Arabic 360L (Topic: The Arab Spring) and 360L (Topic 7) may not both be counted. Additional prerequisite: Upper-division standing, and the following with a grade of at least C: Arabic 120D and 420L, or 531L.

**Topic 8: Readings in Arabic Literature.** Arabic 360L (Topic: Readings in Arabic Literature) and 360L (Topic 8) may not both be counted. Additional prerequisite: Upper-division standing and the following with a grade of at least C: Arabic 120D and 420L, or 531L.

**Topic 9: Refiguring Loss in Contemporary Arabic Literature.** Only one of the following may be counted: Arabic 360L (Topic: Refiguring Loss in Contemporary Arabic Literature), 360L (Topic 9), Middle Eastern Studies 321K (Topic: Refiguring Loss in Contemporary Arabic Literature). Additional prerequisite: Arabic 531L (or 320L or 420L) (or 120D) with a grade of at least C.

**Topic 10: Palestine and the Palestinians: A Journey Through Time.** Only one of the following may be counted: Arabic 360L (Topic: Palestine and the Palestinians), 360L (Topic 10), Middle Eastern Languages and Cultures 321 (Topic 21), Middle Eastern Studies 342 (Topic 31). Additional prerequisite: Arabic 531L with a grade of at least C.

**Topic 11: Arabic Voices from Poetry to Rap.** Focuses on contemporary poetry, specifically examining popular poetry, graphic poetry, rap, slam, hip-hop, and Twitter as a poetic genre. Investigates crossings between contemporary and classical forms, as well as Arabic and non-Arabic genres. Analyzes new poetic forms expressed in a variety of dialectics and cultural contexts, addressing the role of music, digital technology, and political developments in shaping new poetry. Explores various texts in Modern Standard Arabic and dialects from across the Arab world. Three lecture hours a week for one semester. Arabic 360L (Topic: Arabic Voices from Poetry to Rap) and 360L (Topic 11) may not both be counted.

# ARA 369. Conference Course in Arabic Language and Literature.

Supervised individual study of selected problems in Arabic language or literature. Conference course. May be repeated for credit. Prerequisite: Nine semester hours of upper-division coursework in Arabic and consent of instructor.

#### ARA 679H. Honors Tutorial Course.

Supervised individual reading for one semester, followed by research and writing to produce a substantial paper. Conference course for two semesters. Prerequisite: For 679HA, admission to the Arabic Language and Literature Honors Program; for 679HB, Arabic 679HA.

### **Hebrew: HEB**

## **Lower-Division Courses**

### HEB 601C. Intensive Hebrew I.

First semester of intensive Hebrew language instruction. Six lecture hours a week for one semester. Hebrew 601C and 506 may not both be counted. Hebrew 601C and 507 may not both be counted.

### HEB 602C. Intensive Biblical Hebrew I.

Introduction to the language and texts of the Hebrew Bible, taught in the interactive style of a modern language classroom. Six lecture hours a week for one semester. Hebrew 602C and 508 may not both be counted. Hebrew 602C and 509 may not both be counted.

### HEB 506. First-Year Hebrew I.

Not open to native speakers of Hebrew. Modern Israeli Hebrew, including the writing system, basic sentence structure, vocabulary, and simple conversation. Five lecture hours a week for one semester. Hebrew 601C and 506 may not both be counted.

### HEB 507. First-Year Hebrew II.

Not open to native speakers of Hebrew. Continuation of Hebrew 506. Five lecture hours a week for one semester. Hebrew 601C and 507 may not both be counted. Prerequisite: Hebrew 506 with a grade of at least C.

### HEB 611C. Intensive Hebrew II.

Second semester of intensive Hebrew language instruction. Six lecture hours a week for one semester. Hebrew 611C and 412K may not both be counted. Hebrew 611C and 412L may not both be counted. Prerequisite: Hebrew 601C or 507 with a grade of at least C.

### HEB 612C. Intensive Biblical Hebrew II.

Continuing the study of the language and texts of the Hebrew Bible, taught in the interactive style of a modern language classroom. Six lecture hours a week for one semester. Hebrew 612C and 313K may not both be counted. Hebrew 612C and 313L may not both be counted. Prerequisite: Hebrew 602C with a grade of at least C.

### HEB 412K. Second-Year Hebrew I.

Not open to native speakers of Hebrew. Modern Israeli Hebrew. Continuation of Hebrew 507 with expanded grammar and conversation. Four lecture hours a week for one semester. Hebrew 611C and 412K may not both be counted. Prerequisite: Hebrew 507 with a grade of at least C.

### HEB 412L. Second-Year Hebrew II.

Not open to native speakers of Hebrew. Continuation of Hebrew 412K, with emphasis on conversation and composition. Four lecture hours a week for one semester. Hebrew 611C and 312L, 412L may not both be counted. Prerequisite: Hebrew 412K (or 312K) with a grade of at least C.

#### HEB 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Hebrew.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Middle Eastern Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

# **Upper-Division Courses**

### HEB 320K. Hebrew via Popular Culture.

Three lecture hours a week for one semester. Hebrew 320K and 346 (Topic 7: Hebrew via Popular Culture) may not both be counted. Prerequisite: Hebrew 611C or 412l (or 312L) with a grade of at least C.

### HEB 320L. Hebrew through the Media.

Three lecture hours a week for one semester. Hebrew 346 (Topic: Hebrew through the Media) and 320L may not both be counted. Prerequisite: Hebrew 611C.

# HEB 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Hebrew.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Middle Eastern Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### HEB 130D. Hebrew across Disciplines.

Students read and discuss Hebrew language materials related to the subject matter of another designated course. One lecture hour a week for one semester. No more than three semester hours may be counted toward the major in either Middle Eastern Studies or Middle Eastern Languages and Culture. May be repeated for credit. Prerequisite: Upperdivision standing, Hebrew 611C or 412L, and consent of instructor.

# HEB 346. Topics in Hebrew Language, Literature, and Culture.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Hebrew 320L.

**Topic 3: Home and Exile in Contemporary Hebrew Literature.** Hebrew 346 (Topic: Exile and Strangeness in Contemporary Hebrew Literature) and 346 (Topic 3) may not both be counted.

**Topic 8: Jerusalem in Israeli Literature.** Same as Jewish Studies 363 (Topic 18: Jerusalem in Israeli Literature). Additional prerequisite: Upper-division standing and Hebrew 412L.

**Topic 9: Mizrahi Writing in Israel.** Same as Jewish Studies 363 (Topic 8) and Middle Eastern Studies 342 (Topic 9). Only one of the following may be counted: Hebrew 346 (Topic 9), Jewish 363 (Topic 8), Middle Eastern Studies 342 (Topic 9). Additional prerequisite: Upper-division standing, and Hebrew 412L (or 312L) or 320L with a grade of at least C.

**Topic 10: Exile and Strangeness in Contemporary Hebrew Literature.** Introduction to the idea of exile, a central concept in Hebrew literature from the biblical era to today. Focuses on important authors in the modern era and examines how they express and deal with exile. Through select literary works, considers different approaches to exile, a prevalent motif in Jewish identity. Focus on oral and reading comprehension skills in Hebrew. Hebrew 346 (Topic: Exile and Strangeness in Contemporary Hebrew Literature) and 346 (Topic 10) may not both be counted.

# HEB 369. Conference Course in Hebrew Language and Literature.

Supervised individual study of selected problems in Hebrew language or literature. Conference course. May be repeated for credit. Prerequisite: Six semester hours of upper-division coursework in Hebrew and consent of instructor.

#### HEB 679H. Honors Tutorial Course.

Supervised individual reading for one semester, followed by research and writing to produce a substantial paper. Conference course for two semesters. Must be taken for special honors in addition to the major requirement. Prerequisite: For 679HA, upper-division standing and admission to the Hebrew Language and Literature Honors Program; for 679HB, Hebrew 679HA with a grade of A.

### **Islamic Studies: ISL**

#### **Lower-Division Courses**

#### ISL 310. Introduction to Islam.

Same as Asian Studies 301M (Topic 15), History 306N (Topic 7), and Religious Studies 319. The beliefs, theology, history, and main social and legal institutions of Islam, including the concept of God and society, the role of women, and Islamic government and movements. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Asian Studies 301M (Topic 15), History 306N (Topic 7), Islamic Studies 310, Religious Studies 319.

#### ISL 311. Topics in Islamic Studies.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 1: Introduction to the Middle East: Religious, Cultural, and Historical Foundations. A survey of the history and civilization of the Middle East from the sixth to the fourteenth century. Topic 2: Judaism, Christianity, and Islam: An Introduction. Same as History 304R, Jewish Studies 311 (Topic 2: Judaism, Christianity, and Islam: An Introduction), and Religious Studies 304. Examines the intertwined historical developments of the religions of Judaism,

Christianity, and Islam, and explores the principal beliefs and practices of Jews, Christians, and Muslims.

#### ISL 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Islamic Studies.

Credit is recorded while the student is enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Middle Eastern Studies. University credit is awarded for work in an exchange program; it may be counted as coursework counted in residence. Transfer credit is awarded for work in an affiliated studies program. For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit when the topics vary. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

# ISL 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Islamic Studies.

Credit is recorded while the student is enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Middle Eastern Studies. University credit is awarded for work in an exchange program; it may be counted as coursework counted in residence. Transfer credit is awarded for work in an affiliated studies program. For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit when the topics vary. May be repeated for credit when the topics vary.

#### ISL 340. Topics in Islam.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Prophet of Islam: His Life and Times.** Same as History 364G (Topic 2) and Religious Studies 325. A detailed study of the prophet Muhammad's life and message, and of the means by which his life was recorded and popularized. Only one of the following may be counted: History 364G (Topic 2), Islamic Studies 340 (Topic 1), Religious Studies 325. Additional prerequisite: Upper-division standing.

**Topic 2: The Qur'an.** Same as Comparative Literature 323 (Topic 37), Core Texts and Ideas 375 (Topic 1), Middle Eastern Languages and Cultures 321 (Topic 9), Middle Eastern Studies 342 (Topic 16), Religious Studies 325G, and Women's and Gender Studies 340 (Topic 54). The history, language, style, and themes of the Qur'an. Only one of the following may be counted: Comparative Literature 323 (Topic: The Qur'an), 323 (Topic 37), Core Texts and Ideas 375 (Topic: The Qur'an), Core Texts and Ideas 375 (Topic 1), Islamic Studies 340 (Topic 2), Middle Eastern Languages and Cultures 321 (Topic 9), Middle Eastern Studies 342 (Topic 16), Religious Studies 325G, Women's and Gender Studies 340 (Topic: The Qur'an), 340 (Topic 54). Additional prerequisite: Upper-division standing.

**Topic 3: Classical Islamic Studies.** Same as Middle Eastern Languages and Cultures 321 (Topic 15), Middle Eastern Studies 342 (Topic 15), and Religious Studies 358 (Topic 10). Only one of the following may be counted: Islamic Studies 340 (Topic 3), Middle Eastern Languages and Cultures 321 (Topic 15), Middle Eastern Studies 342 (Topic 15), Religious Studies 358 (Topic: Classical Islamic Studies), Religious Studies 358 (Topic 10). Additional prerequisite: Upper-division standing.

**Topic 4: Sufism and Islamic Mysticism.** Same as Asian Studies 340 (Topic 8), Middle Eastern Studies 342 (Topic 24), and Religious Studies 358 (Topic 4). Muslim debates of Sufism; the historical development of Sufi beliefs regarding theology, religious laws, expression, and popular social practices. Only one of the following may be counted: Asian Studies 340 (Topic: Sufism and Islamic Mysticism), Asian Studies 340 (Topic 8), History 364G (Topic: Sufism and Islamic Mysticism), Islamic Studies 340 (Topic 4), Middle Eastern Studies 320 (Topic 16: Sufism: Islamic Mysticism and Spirituality), 342 (Topic 24), Religious Studies 341 (Topic: Sufism and Islamic Mysticism), 358 (Topic 4). Additional prerequisite: Upper-division standing.

**Topic 5: Islamic Law.** Same as Middle Eastern Languages and Cultures 321 (Topic 19), Middle Eastern Studies 342 (Topic 27), Religious Studies 358 (Topic 9), and Women's and Gender Studies 340 (Topic 27). Designed to give students a foundation in the substantive teachings of the shariah, which comprises not only what we normally think of as law, but also ethics and etiquette. Only one of the following may be counted: Islamic Studies 340 (Topic: Islamic Law), 340 (Topic 5), Middle Eastern Languages and Cultures 321 (Topic: Islamic Law), 321 (Topic 19), Middle Eastern Studies 342 (Topic 27), Religious Studies 358 (Topic: Islamic Law), 358 (Topic 9), Women's and Gender Studies 340 (Topic: Islamic Law), 340 (Topic 27).

Topic 6: The Religions of the Middle East. Same as Middle Eastern Languages and Cultures 321 (Topic 26), Middle Eastern Studies 342 (Topic 34), and Religious Studies 358 (Topic 15). Three lecture hours per week for one semester. Only one of the following may be counted: Islamic Studies 340 (Topic: Religions of the Middle East), 340 (Topic 6), Middle Eastern Languages and Cultures 321 (Topic 26), Middle Eastern Studies 322K (Topic: Religions of the Middle East), 342 (Topic 34), Religious Studies 358 (Topic: Religions of the Middle East), 342 (Topic 34), Religious Studies 358 (Topic: Religions of the Middle East), 358 (Topic 15). Additional prerequisite: Upper-division standing. **Topic 7: Islamic Theology.** Same as Core Texts and Ideas 375 (Topic 2), Middle Eastern Languages and Cultures 321 (Topic 27), Middle Eastern Studies 342 (Topic 35), and Religious Studies 358 (Topic 14). Three lecture hours per week for one semester. Only one of the following may be counted: Core Texts and Ideas 375 (Topic: Islamic Theology), 375 (Topic 2), Islamic Studies 340 (Topic: Islamic Theology), 340 (Topic 7), Middle Eastern Languages and Cultures 321 (Topic: Islamic Theology), 321 (Topic: 27), Middle Eastern Studies 321K (Topic: Islamic Theology), 342 (Topic: Islamic Theology), 342 (Topic 35), Religious Studies 358 (Topic: Islamic Theology), 358 (Topic 14). Additional prerequisite: Upper-division standing.

#### ISL 369. Conference Course in Islamic Studies.

Supervised individual study of selected problems in Islamic studies. Conference course. May be repeated for credit. Prerequisite: Upperdivision standing and consent of instructor.

#### ISL 372. Topics in Islamic Cultures.

Three lecture hours a week for one semester; additional hours may be required for some topics. Islamic Studies 372 and 373 may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 2: Veiling in the Muslim World.** Same as Asian Studies 372 (Topic 14), Middle Eastern Languages and Cultures 321 (Topic 22), Religious Studies 358 (Topic 5), and Women's and Gender Studies 340 (Topic 11). Only one of the following may be counted: Asian Studies 372 (Topic 14), Islamic Studies 372 (Topic 2), Middle Eastern Languages and Cultures 321 (Topic 22), Religious Studies 358 (Topic 5), Women's and Gender Studies 340 (Topic 11).

**Topic 11: Sacred and Ceremonial Textiles.** Same as Anthropology 324L (Topic 29), Middle Eastern Languages and Cultures 321 (Topic 34), Religious Studies 358 (Topic 11), and Women's and Gender Studies 340 (Topic 57). Textiles and material objects indigenous to the Islamic world, and what they reveal about the culture of various Islamic societies. Only one of the following may be counted: Anthropology 324L (Topic 29), Islamic Studies 372 (Topic 11), Middle Eastern Languages and Cultures 321 (Topic: Sacred and Ceremonial Textiles), 321 (Topic 34), Middle Eastern Studies 328 (Topic: Sacred and Ceremonial Textiles), Religious Studies 358 (Topic: Sacred and Ceremonial Textiles), 358 (Topic 11), Textiles and Apparel 355 (Topic: Sacred and Ceremonial Textiles), Women's and Gender Studies 340 (Topic: Sacred and Ceremonial Textiles), 340 (Topic 57).

**Topic 12: Muslim Women: Past and Present I.** Same as Religious Studies 358 (Topic 12) and Women's and Gender Studies 340 (Topic 22). Survey of the role of women in Islamic societies from the Middle Ages to the eighteenth century, with a glimpse into modern times. Only one of the following may be counted: Islamic Studies 372 (Topic 12), Religious Studies 358 (Topic: Muslim Women: Past and Present I), 358 (Topic 12) Women's and Gender Studies 340 (Topic 22). Additional prerequisite: Upper-division standing.

**Topic 13: Muslim Women: Past and Present II.** Same as Religious Studies 358 (Topic 13) and Women's and Gender Studies 340 (Topic 23). Survey of the role of women in the modern Muslim world, with a glimpse into historical developments within Islamic societies. Only one of the following may be counted: Islamic Studies 372 (Topic 13), Religious Studies 358 (Topic: Muslim Women: Past and Present II), 358 (Topic 13), Women's and Gender Studies 340 (Topic 23). Additional prerequisite: Upper-division standing.

**Topic 20: Mughal India in History and Memory.** Same as Asian Studies 361 (Topic 33) and History 350L (Topic 67). Focuses on South Asia during the era of the Mughal empire (1550-1750), continuing through the symbolic relevance of the Mughal dynasty in British India and in India today. Only one of the following may be counted: Asian Studies 361 (Topic: Mughal India in History and Memory), 361 (Topic 33), History 350L (Topic: Mughal India in History and Memory), 350L (Topic 67), Islamic Studies 372 (Topic: Mughal India in History and Memory), 372 (Topic 20).

**Topic 21: The History of Islam in the United States.** Same as History 350R (Topic 22) and Religious Studies 346 (Topic 10). A brief introduction to Islam. Defines the role of Islam and views of Muslims

in the early history of the United States, and introduces students to major issues concerning contemporary American Muslims. Only one of the following may be counted: History 350R (Topic: History of Islam in the United States), 350R (Topic 22), Islamic Studies 372 (Topic: History of Islam in the United States), 372 (Topic 21), Religious Studies 346 (Topic: History of Islam in the United States), 346 (Topic 10).

**Topic 22: French Empire: The West and Islam.** Same as History 364G (Topic 7) and Religious Studies 358 (Topic 16). The development of regions within the Mediterranean, variously called the West and East or Europe and Islam, with an emphasis on the role of modern France and France's Mediterranean empire. Three lecture hours for one semester. Only one of the following may be counted: History 364G (Topic: French Empire: The West and Islam), 364G (Topic 7), Islamic Studies 372 (Topic: French Empire: The West and Islam), 372 (Topic 22), Middle Eastern Studies 343 (Topic: French Empire: The West and Islam), Religious Studies 358 (Topic: French Empire: The West and Islam), 358 (Topic 16).

**Topic 23: Muslim Women in Politics.** Same as Religious Studies 358 (Topic 19) and Women's and Gender Studies 340 (Topic 56). Only one of the following may be counted: Anthropolgy 324L (Topic: Muslim Women in Politics), Islamic Studies 372 (Topic: Muslim Women in Politics), 372 (Topic 23), Religious Studies 358 (Topic: Muslim Women in Politics), 358 (Topic 19), Women's and Gender Studies 340 (Topic: Muslim Women in Politics), 340 (Topic 56).

#### ISL 373. Topics in Middle Eastern Islamic Cultures.

Three lecture hours a week for one semester; additional hours may be required for some topics. Islamic Studies 372 and 373 may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 1: Introduction to Arabic Literature. Same as Comparative Literature 323 (Topic 13), Middle Eastern Languages and Cultures 321 (Topic 1), and Middle Eastern Studies 342 (Topic 1). General survey of major themes, genres, and artists in the Arabic literary tradition from the sixth century to the modern era. Only one of the following may be counted: Comparative Literature 323 (Topic: Introduction to Arabic Literature), 323 (Topic 13), Islamic Studies 373 (Topic 1), Middle Eastern Languages and Cultures 321 (Topic 1), Middle Eastern Studies 342 (Topic 1). Additional prerequisite: Upper-division standing. **Topic 2: Loyalty and Rebellion in Arabic Literature.** Same as Middle Eastern Languages and Cultures 321 (Topic 2) and Middle Eastern Studies 342 (Topic 2). Only one of the following may be counted: Islamic Studies 373 (Topic 2), Middle Eastern Languages and Cultures 321 (Topic 2), Middle Eastern Studies 342 (Topic 2). Additional prerequisite: Upper-division standing.

**Topic 3: Memory and Identity in Ancient Arabia.** Same as Middle Eastern Languages and Cultures 321 (Topic 3) and Middle Eastern Studies 342 (Topic 3). Only one of the following may be counted: Islamic Studies 373 (Topic 3), Middle Eastern Languages and Cultures 321 (Topic 3), Middle Eastern Studies 342 (Topic 3). Additional prerequisite: Upper-division standing.

**Topic 4: The Arabian Nights.** Same as Middle Eastern Languages and Cultures 321 (Topic 4) and Middle Eastern Studies 342 (Topic 4). Only one of the following may be counted: Comparative Literature 323 (Topic: The Arabian Nights), Middle Eastern Languages and Cultures 321 (Topic 4), Religious Studies 358 (Topic: The Arabian Nights), Women's and Gender Studies 340 (Topic: The Arabian Nights). Additional prerequisite: Upper-division standing.

**Topic 5: Modern Egypt: A History.** Same as History 334E and Middle Eastern Studies 343 (Topic 1). Critically examines the social, political, and intellectual dynamics that shaped the different forms of political community, economic organization, and public culture over the past century. Covers colonialism, liberalism, Arab socialism, authoritarian

capitalism, and Islamic republicanism. Three lecture hours a week for one semester. Only one of the following may be counted: History 334E, History 364G (Topic: Modern Egypt: A History), Islamic Studies 372 (Topic: Modern Egypt: A History), 373 (Topic 5), Middle Eastern Studies 343 (Topic 1). Additional prerequisite: Upper-division standing. **Topic 6: Politics of Court Literature.** Same as Arabic 360L (Topic 3) and Middle Eastern Studies 342 (Topic 25). Only one of the following may be counted: Arabic 360L (Topic 3), Comparative Literature 323 (Topic: Politics of Court Literature), Islamic Studies 373 (Topic 6), Middle Eastern Studies 342 (Topic 25). Additional prerequisite: Upperdivision standing; Arabic 120D and 420L with a grade of at least C in each, or Arabic 531L with a grade of at least C.

**Topic 7: Arab Women Poets.** Same as Arabic 360L (Topic 2) and Middle Eastern Studies 342 (Topic 26). Only one of the following may be counted: Arabic 360L (Topic 2), Comparative Literature 323 (Topic: Arab Women Poets), Islamic Studies 373 (Topic 7), Middle Eastern Studies 342 (Topic 26). Additional prerequisite: Upper-division standing, and Arabic 420L with a grade of at least C in each, or Arabic 531L with a grade of at least C.

Topic 8: Gender in North and West Africa. Same as African and African Diaspora Studies 372G (Topic 5), Middle Eastern Languages and Cultures 321 (Topic 16), Middle Eastern Studies 342 (Topic 28), and Women's and Gender Studies 340 (Topic 34), Examines gender discourses through North African and West African literary works by looking at the role(s) played by Islam and Christianity in the creation of the identities of African men and women. Includes discussion of the question of what gender is, and whether it is socially constructed. Only one of the following may be counted: African and African Diaspora Studies 372G (Topic 5), 374C (Topic: Gender in North and West Africa), Islamic Studies 372 (Topic: Gender in North and West Africa), 373 (Topic 8), Middle Eastern Languages and Cultures 321 (Topic 16), Middle Eastern Studies 342 (Topic 28), Women's and Gender Studies 340 (Topic: Gender in North and West Africa), 340 (Topic 34). Additional prerequisite: Upper-division standing. Topic 9: The Cities of the Middle East. Same as Anthropology 324L (Topic 51), Middle Eastern Studies 341 (Topic 3), and Urban Studies 354 (Topic 15). Anthropological and sociological analysis of space, with a special emphasis on urban theory and culture in the Middle East. Only one of the following may be counted: Anthropology 324L (Topic: Cities of the Middle East), 324L (Topic 51), Islamic Studies 373 (Topic: Cities of the Middle East), 373 (Topic 9), Middle Eastern Studies 322K (Topic: Cities of the Middle East), 341 (Topic 3), Urban Studies 354 (Topic: Cities of the Middle East), 354 (Topic 15). Topic 10: Iranian Culture. Same as Middle Eastern Languages and Cultures 321 (Topic 20) and Middle Eastern Studies 342 (Topic 30). Only one of the following may be counted: Islamic Studies 373 (Topic: Iranian Culture), Islamic Studies 373 (Topic 10), Middle Eastern Languages and Culture 321 (Topic: Iranian Culture), Middle Eastern Languages and Cultures (Topic 20), Middle Eastern Studies 342 (Topic: Iranian Culture), Middle Eastern Studies 342 (Topic 30), Persian 372 (Topic: Iranian Culture). Additional prerequisite: Upper-division standing.

**Topic 11: Gender Politics in the Islamic World.** Same as Middle Eastern Studies 341 (Topic 7), Religious Studies 358 (Topic 8), Sociology 336G, and Women's and Gender Studies 340 (Topic 44). Study of the Islamic world and major sociological concepts such as gender, social organizations, culture, and politics. Examines how culture is mediated by politics, resulting in diverse interpretations of Islam and in different policies with respect to women's rights. Three lecture hours a week for one semester. Only one of the following may be counted: Islamic Studies 373 (Topic: Gender Politics in the Islamic World), 373 (Topic 11), Middle Eastern Studies 322K (Topic: Gender Politics in the Islamic World), 341 (Topic: Gender Politics in the Islamic World), 341 (Topic 7), Religious Studies 358 (Topic: Gender Politics in the Islamic World), 358 (Topic 8), Sociology 321K (Topic: Gender Politics in the Islamic World), 336G, Women's and Gender Studies 340 (Topic: Gender Politics in the Islamic World), 340 (Topic 44). Additional prerequisite: Upper-division standing.

Topic 12: Rumi and the Persian Sufi Tradition. Same as Middle Eastern Languages and Cultures 321 (Topic 28) and Middle Eastern Studies 342 (Topic 36). Only one of the following may be counted: Comparative Literature 323 (Topic: Rumi & Persian Sufi Tradition), Islamic Studies 372 (Topic: Rumi & Persian Sufi Tradition), Islamic Studies 373 (Topic: Rumi & Persian Sufi Tradition), Islamic Studies 373 (Topic 12), Middle Eastern Languages and Cultures 321 (Topic: Rumi & Persian Sufi Tradition), Middle Eastern Languages and Cultures 321 (Topic 28), Middle Eastern Studies 321K (Topic: Rumi & Persian Sufi Tradition), Middle Eastern Studies 342 (Topic: Rumi & Persian Sufi Tradition), Middle Eastern Studies 342 (Topic: Rumi & Persian Sufi Tradition), Middle Eastern Studies 342 (Topic 36), Persian 361 (Topic: Rumi & Persian Sufi Tradition), Religious Studies 358 (Topic: Rumi & Persian Sufi Tradition). Additional prerequisite: Upperdivision standing.

Topic 14: The Middle East in World Poetry. Same as Middle Eastern Languages and Cultures 321 (Topic 30) and Middle Eastern Studies 342 (Topic 39). Three lecture hours a week for one semester. Only one of the following may be counted: Comparative Literature 323 (Topic: Middle East in World Poetry), Islamic Studies 373 (Topic: Middle East in World Poetry), 373 (Topic 14), Middle Eastern Languages and Cultures 321 (Topic: Middle East in World Poetry), 321 (Topic 30), Middle Eastern Studies 342 (Topic: Middle East in World Poetry), 342 (Topic 39). Additional prerequisite: Upper-division standing. Topic 15: Gender and Art in the Muslim World. Same as Asian Studies 372 (Topic 46), Middle Eastern Languages and Cultures 321 (Topic 31), Middle Eastern Studies 342 (Topic 40), Religious Studies 358 (Topic 20), and Women's and Gender Studies 340 (Topic 62). Only one of the following may be counted: Asian Studies 372 (Topic: Gender and Art in Muslim World), 372 (Topic 46), Islamic Studies 373 (Topic: Gender and Art in Muslim World), 373 (Topic 15), Middle Eastern Languages and Cultures 321 (Topic: Gender and Art in Muslim World), 321 (Topic 31), Middle Eastern Studies 342 (Topic: Gender and Art in Muslim World), 342 (Topic 40), Religious Studies 358 (Topic: Gender and Art in Muslim World), 358 (Topic 20), Women's and Gender Studies 340 (Topic: Gender and Art in Muslim World), 340 (Topic 62). Prerequisite: Upper-division standing.

**Topic 16: Persian Art: Past and Present.** Same as Middle Eastern Languages and Cultures 321 (Topic 35) and Middle Eastern Studies 342 (Topic 43). Only one of the following may be counted: Islamic Studies 373 (Topic: Persian Art: Past and Present), 373 (Topic 16), Middle Eastern Languages and Cultures 321 (Topic: Persian Art: Past and Present), 321 (Topic 35), Middle Eastern Studies 342 (Topic: Persian Art: Past and Present), 342 (Topic 43). Prerequisite: Upperdivision standing.

**Topic 17: Graffiti and Poster Art in the Islamic World**. Same as Anthropology 324L (Topic 59), Middle Eastern Languages and Cultures 321 (Topic 36), Middle Eastern Studies 342 (Topic 44), Religious Studies 358 (Topic 21), and Women's and Gender Studies 340 (Topic 67). Only one of the following may be counted: Anthropology 324L (Topic: Graffiti/Poster Art: Islam World), 324L (Topic 59), Islamic Studies 373 (Topic: Graffiti/Poster Art: Islam World), 373 (Topic 17), Middle Eastern Languages and Cultures 321 (Topic: Graffiti/Poster Art: Islam World), 321 (Topic 36), Middle Eastern Studies 342 (Topic: Graffiti/Poster Art: Islam World), 342 (Topic 44), Religious Studies 358 (Topic: Graffiti/Poster Art: Islam World), 358 (Topic 21), Women's and Gender Studies 340 (Topic: Graffiti/Poster Art: Islam World), 340 (Topic 67). Prerequisite: Upper-division standing.

#### ISL 679H. Honors Tutorial Course.

Supervised individual reading for one semester, following by research and writing to produce a substantial paper on a specific topic in Islamic studies to be completed during the second semester. Conference course for two semesters. Prerequisite: For 679HA, upper-division standing and admission to the Islamic Studies Honors Program; for 679HB, Islamic Studies 679HA.

# Middle Eastern Languages and Cultures: MEL

### **Lower-Division Courses**

#### MEL 301. Gateway to the Middle East.

Three lecture hours a week for one semester.

### **Upper-Division Courses**

#### MEL 321. Topics in Middle Eastern Languages and Cultures.

Three lecture hours a week for one semester. Only one of the following may be counted unless the topics vary: Islamic Studies 372, Middle Eastern Languages and Cultures 321, Middle Eastern Studies 342. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 1: Introduction to Arabic Literature. Same as Comparative Literature 323 (Topic 13), Islamic Studies 373 (Topic 1), and Middle Eastern Studies 342 (Topic 1). General survey of major themes, genres, and artists in the Arabic literary tradition from the sixth century to the modern era. Only one of the following may be counted: Comparative Literature 323 (Topic: Introduction to Arabic Literature), 323 (Topic 13), Islamic Studies 373 (Topic 1), Middle Eastern Languages and Cultures 321 (Topic 1), Middle Eastern Studies 342 (Topic 1). Additional prerequisite: Upper-division standing. Topic 2: Loyalty and Rebellion in Arabic Literature. Same as Islamic Studies 373 (Topic 2) and Middle Eastern Studies 342 (Topic 2). Only one of the following may be counted: Islamic Studies 373 (Topic 2), Middle Eastern Languages and Cultures 321 (Topic 2), Middle Eastern Studies 342 (Topic 2). Additional prerequisite: Upper-division standing. Topic 3: Memory and Identity in Ancient Arabia. Same as Islamic Studies 373 (Topic 3) and Middle Eastern Studies 342 (Topic 3). Only one of the following may be counted: Islamic Studies 373 (Topic 3), Middle Eastern Languages and Cultures 321 (Topic 3), Middle Eastern Studies 342 (Topic 3). Additional prerequisite: Upper-division standing. Topic 4: The Arabian Nights. Same as Islamic Studies 373 (Topic 4) and Middle Eastern Studies 342 (Topic 4). Only one of the following may be counted: Comparative Literature 323 (Topic: The Arabian Nights), Middle Eastern Languages and Cultures 321 (Topic 4), Religious Studies 358 (Topic: The Arabian Nights), Women's and Gender Studies 340 (Topic: The Arabian Nights). Additional prerequisite: Upper-division standing.

Topic 5: Israel Through Its Literature. Same as Comparative Literature 323 (Topic 15), Jewish Studies 363 (Topic 17), and Middle Eastern Studies 342 (Topic 5). Only one of the following may be counted: Comparative Literature 323 (Topic: Introduction to Israeli Literature), Comparative Literature 323 (Topic 15), English 322 (Topic: Introduction to Israeli Literature), Jewish Studies 363 (Topic 17), Middle Eastern Languages and Cultures 321 (Topic 5), Middle Eastern Studies 342 (Topic 5). Additional prerequisite: Upper-division standing. Topic 6: Love and the State in Contemporary Israeli Literature. Same as Jewish Studies 363 (Topic 7) and Middle Eastern Studies 342 (Topic 6). Only one of the following may be counted: Comparative Literature 323 (Topic: Love and State in Contemporary Israeli Literature), English 322 (Topic: Love and State in Contemporary Israeli Literature), Jewish Studies 363 (Topic 7), Middle Eastern Languages and Cultures 321 (Topic 6), Middle Eastern Studies 342 (Topic 6), Women's and Gender Studies 340 (Topic: Love and State in Contemporary Israeli Literature). Additional prerequisite: Upperdivision standing.

**Topic 7: Postmodernist Israeli Literature.** Same as Jewish Studies 363 (Topic 19) and Middle Eastern Studies 342 (Topic 7). Study of the first decades of Israeli literature. Themes include the establishment of a

new state in the aftermath of the Holocaust, conflict between Israel and Arab nations, and conflict between Israelis and Palestinians. Only one of the following may be counted: Comparative Literature 323 (Topic: Postmodernist Israeli Literature), English 322 (Topic: Postmodernist Israeli Literature), Jewish Studies 363 (Topic 19), Middle Eastern Languages and Cultures 321 (Topic 7), 342 (Topic 7). Additional prerequisite: Upper-division standing.

**Topic 8: The Sacred and the Secular in Contemporary Jewish Literature.** Same as Jewish Studies 363 (Topic 10), Middle Eastern Studies 342 (Topic 8), and Religious Studies 353 (Topic 3). Only one of the following may be counted: Comparative Literature 323 (Topic: The Sacred and the Secular in Contemporary Jewish Literature), English 322 (Topic: The Sacred and the Secular in Contemporary Jewish Literature), Jewish Studies 363 (Topic 10), Middle Eastern Languages and Cultures 321 (Topic 8), Middle Eastern Studies 342 (Topic 8), Religious Studies 353 (Topic: The Sacred and the Secular in Contemporary Jewish Literature), 353 (Topic 3). Additional prerequisite: Upper-division standing.

**Topic 9: The Qur'an.** Same as Comparative Literature 323 (Topic 37), Core Texts and Ideas 375 (Topic 1), Islamic Studies 340 (Topic 2), Middle Eastern Studies 342 (Topic 16), Religious Studies 325G, and Women's and Gender Studies 340 (Topic 54). The history, language, style, and themes of the Qur'an. Only one of the following may be counted: Comparative Literature 323 (Topic: The Qur'an), 323 (Topic 37), Core Texts and Ideas 375 (Topic: The Qur'an), Core Texts and Ideas 375 (Topic 1), Islamic Studies 340 (Topic 2), Middle Eastern Languages and Cultures 321 (Topic 9), Middle Eastern Studies 342 (Topic 16), Religious Studies 325G, Women's and Gender Studies 340 (Topic: The Qur'an), 340 (Topic 54). Additional prerequisite: Upperdivision standing.

**Topic 10: Persian Literature, Past and Present.** Same as Middle Eastern Studies 342 (Topic 10). Middle Eastern Languages and Cultures 321 (Topic 10) and Middle Eastern Studies 342 (Topic 10) may not both be counted. Additional prerequisite: Upper-division standing.

Topic 11: Iranian Women Writers. Same as Middle Eastern Studies 342 (Topic 11) and Women's and Gender Studies 340 (Topic 10). Only one of the following may be counted: Middle Eastern Languages and Cultures 321 (Topic 11), Middle Eastern Studies 342 (Topic 11), WGS 340 (Topic 10). Additional prerequisite: Upper-division standing. Topic 12: Images of the West and Westerners in Persian Fiction. Same as Middle Eastern Studies 342 (Topic 12). Middle Eastern Languages and Cultures 321 (Topic 12) and Middle Eastern Studies 342 (Topic 12) may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 13: Iranian Literature in Exile.** Same as Middle Eastern Studies 342 (Topic 13). Middle Eastern Languages and Cultures 321 (Topic 13) and Middle Eastern Studies 342 (Topic 13) may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 14: Iranian Film and Fiction.** Same as Middle Eastern Studies 342 (Topic 14). Middle Eastern Languages and Cultures 321 (Topic 14) and Middle Eastern Studies 342 (Topic 14) may not both be counted. Additional prerequisite: Upper-division standing.

Topic 15: Classical Islamic Studies. Same as Islamic Studies 340 (Topic 3), Middle Eastern Studies 342 (Topic 15), and Religious Studies 358 (Topic 10). Only one of the following may be counted: Islamic Studies 340 (Topic 3), Middle Eastern Languages and Cultures 321 (Topic 15), Middle Eastern Studies 342 (Topic 15), Religious Studies 358 (Topic: Classical Islamic Studies), Religious Studies 358 (Topic 10). Additional prerequisite: Upper-division standing. Topic 16: Gender in North and West Africa. Same as African and African Diaspora Studies 372G (Topic 5), Islamic Studies 373 (Topic 8), Middle Eastern Studies 342 (Topic 28), and Women's and Gender Studies 340 (Topic 34). Examines gender discourses through North African and West African literary works by looking at the role(s) played by Islam and Christianity in the creation of the identities of African men and women. Includes discussion of the question of what gender is, and whether it is socially constructed. Only one of the following may be counted: African and African Diaspora Studies 372G (Topic 5), 374C (Topic: Gender in North and West Africa), Islamic Studies 372 (Topic: Gender in North and West Africa), 373 (Topic 8), Middle Eastern Languages and Cultures 321 (Topic 16), Middle Eastern Studies 342 (Topic 28), Women's and Gender Studies 340 (Topic: Gender in North and West Africa), 340 (Topic 34). Additional prerequisite: Upperdivision standing.

Topic 17: The Dead Sea Scrolls. Same as Ancient History and Classical Civilization 330 (Topic 1), History 364G (Topic 3), Jewish Studies 364 (Topic 4), Middle Eastern Studies 342 (Topic 23), and Religious Studies 353D. Three lecture hours a week for one semester. Only one of the following may be counted: Ancient History and Classical Civilization 330 (Topic: The Dead Sea Scrolls), 330 (Topic 1), History 364G (Topic 3), Jewish Studies 364 (Topic 4), Middle Eastern Languages and Cultures 321 (Topic 17), 342 (Topic 23), Religious Studies 353D. Additional prerequisite: Upper-division standing. Topic 18: In Search of King David. Same as Jewish Studies 363 (Topic 20), Middle Eastern Studies 342 (Topic 29), and Religious Studies 365 (Topic 3). Only one of the following may be counted: Jewish Studies 363 (Topic: In Search of King David), 363 (Topic 20), Middle Eastern Languages and Cultures 321 (Topic: In Search of King David), 321 (Topic 18), Middle Eastern Studies 342 (Topic: In Search of King David), 342 (Topic 29), Religious Studies 365 (Topic: In Search of King David), 365 (Topic 3). Prerequisite: Upper-division standing. Topic 19: Islamic Law. Same as Islamic Studies 340 (Topic 5), Middle Eastern Studies 342 (Topic 27), Religious Studies 358 (Topic 9), and Women's and Gender Studies 340 (Topic 27). Designed to give students a foundation in the substantive teachings of the shariah, which comprises not only what we normally think of as law, but also ethics and etiquette. Only one of the following may be counted: Islamic Studies 340 (Topic: Islamic Law), 340 (Topic 5), Middle Eastern Languages and Cultures 321 (Topic: Islamic Law), 321 (Topic 19). Middle Eastern Studies 342 (Topic 27), Religious Studies 358 (Topic: Islamic Law), 358 (Topic 9), Women's and Gender Studies 340 (Topic: Islamic Law), 340 (Topic 27).

**Topic 20: Iranian Culture.** Same as Islamic Studies 373 (Topic 10) and Middle Eastern Studies 342 (Topic 30). Only one of the following may be counted: Islamic Studies 373 (Topic: Iranian Culture), Islamic Studies 373 (Topic 10), Middle Eastern Languages and Culture 321 (Topic: Iranian Culture), Middle Eastern Languages and Cultures (Topic 20), Middle Eastern Studies 342 (Topic: Iranian Culture), Middle Eastern Studies 342 (Topic: Iranian Culture), Middle Eastern Studies 342 (Topic: Iranian Culture). Additional prerequisite: Upper-division standing.

**Topic 21: Palestine and the Palestinians: A Journey Through Time.** Same as Middle Eastern Studies 342 (Topic 31). Three lecture hours per week for one semester. Only one of the following may be counted: Arabic 360L (Topic: Palestine and the Palestinians), 360L (Topic 10), Middle Eastern Languages and Cultures 321 (Topic 21), Middle Eastern Studies 342 (Topic 31). Additional prerequisite: Upper-division standing.

Topic 22: Veiling in the Muslim World. Same as Asian Studies 372 (Topic 14), Islamic Studies 372 (Topic 2), Religious Studies 358 (Topic 5), and Women's and Gender Studies 340 (Topic 11). Only one of the following may be counted: Asian Studies 372 (Topic 14), Islamic Studies 372 (Topic 2), Middle Eastern Languages and Cultures 321 (Topic 22), Religious Studies 358 (Topic 5), Women's and Gender Studies 340 (Topic 11).

**Topic 23: Women Filmmakers in the Middle East.** Same as Middle Eastern Studies 342 (Topic 32) and Women's and Gender Studies 340 (Topic 55). Only one of the following may be counted: Middle Eastern Languages and Cultures 321 (Topic 23), Middle Eastern Studies 322K (Topic: Women Filmmakers in the Middle East), 342 (Topic 32), Turkish

372 (Topic: Women Filmmakers in the Middle East), Women's and Gender Studies 340 (Topic: Women Filmmakers in the Middle East), 340 (Topic 55). Additional prerequisite: Upper-division standing. Topic 24: Biblical Prophecy. Same as Middle Eastern Studies 342 (Topic 37). Only one of the following may be counted: Hebrew 374 (Topic: Biblical Prophecy), Middle Eastern Languages and Cultures 321 (Topic 24), Middle Eastern Studies 320 (Topic: Biblical Prophecy), 342 (Topic 37), Religious Studies 353 (Topic: Biblical Prophecy). Topic 25: Love in the East and West. Same as Comparative Literature 323 (Topic 36), Core Texts and Ideas 345 (Topic 10), and Middle Eastern Studies 342 (Topic 33). Three lecture hours a week for one semester. Only one of the following may be counted: Comparative Literature 323 (Topic: Love in the East and West), Comparative Literature 323 (Topic 36), Core Texts and Ideas 345 (Topic: Love in the East and West), Core Texts and Ideas 345 (Topic 10), Middle Eastern Languages and Cultures 321 (Topic: Love in the East and West), Middle Eastern Languages and Cultures 321 (Topic 25), Middle Eastern Studies 321K (Topic: Love in the East and West), Middle Eastern Studies 342 (Topic 33), Turkish 372 (Topic: Love in the East and West). Additional prerequisite: Upper-division standing. Topic 26: The Religions of the Middle East. Same as Islamic Studies 340 (Topic 6), Middle Eastern Studies 342 (Topic 34), and Religious Studies 358 (Topic 15). Three lecture hours per week for one semester. Only one of the following may be counted: Islamic Studies 340 (Topic: Religions of the Middle East), 340 (Topic 6), Middle Eastern Languages and Cultures 321 (Topic 26), Middle Eastern Studies 322K (Topic: Religions of the Middle East), 342 (Topic 34), Religious Studies 358 (Topic: Religions of the Middle East), 358 (Topic 15). Additional prerequisite: Upper-division standing.

**Topic 27: Islamic Theology.** Same as Core Texts and Ideas 375 (Topic 2), Islamic Studies 340 (Topic 7), Middle Eastern Studies 342 (Topic 35), and Religious Studies 358 (Topic 14). Three lecture hours per week for one semester. Only one of the following may be counted: Core Texts and Ideas 375 (Topic: Islamic Theology), 375 (Topic 2), Islamic Studies 340 (Topic: Islamic Theology), 340 (Topic 7), Middle Eastern Languages and Cultures 321 (Topic: Islamic Theology), 321 (Topic: 27), Middle Eastern Studies 321K (Topic: Islamic Theology), 342 (Topic: Islamic Theology), 342 (Topic: Islamic Theology), 358 (Topic 14). Additional prerequisite: Upper-division standing.

Topic 28: Rumi and the Persian Sufi Tradition. Same as Islamic Studies 373 (Topic 12) and Middle Eastern Studies 342 (Topic 36). Only one of the following may be counted: Comparative Literature 323 (Topic: Rumi & Persian Sufi Tradition), Islamic Studies 372 (Topic: Rumi & Persian Sufi Tradition), Islamic Studies 373 (Topic: Rumi & Persian Sufi Tradition), Islamic Studies 373 (Topic 12), Middle Eastern Languages and Cultures 321 (Topic: Rumi & Persian Sufi Tradition), Middle Eastern Languages and Cultures 321 (Topic 28), Middle Eastern Studies 321K (Topic: Rumi & Persian Sufi Tradition), Middle Eastern Studies 342 (Topic: Rumi & Persian Sufi Tradition), Middle Eastern Studies 342 (Topic 36), Persian 361 (Topic: Rumi & Persian Sufi Tradition), Religious Studies 358 (Topic: Rumi & Persian Sufi Tradition). Additional prerequisite: Upper-division standing. Topic 30: The Middle East in World Poetry. Same as Islamic Studies 373 (Topic 14) and Middle Eastern Studies 342 (Topic 39). Three lecture hours a week for one semester. Only one of the following may be counted: Comparative Literature 323 (Topic: Middle East in World Poetry), Islamic Studies 373 (Topic: Middle East in World Poetry), 373 (Topic 14), Middle Eastern Languages and Cultures 321 (Topic: Middle East in World Poetry), 321 (Topic 30), Middle Eastern Studies 342 (Topic: Middle East in World Poetry), 342 (Topic 39). Additional prerequisite: Upper-division standing.

**Topic 31: Gender and Art in the Muslim World.** Same as Asian Studies 372 (Topic 46), Islamic Studies 373 (Topic 15), Middle Eastern Studies 342 (Topic 40), Religious Studies 358 (Topic 20), and Women's and

Gender Studies 340 (Topic 62). Only one of the following may be counted: Asian Studies 372 (Topic: Gender and Art in Muslim World), 372 (Topic 46), Islamic Studies 373 (Topic: Gender and Art in Muslim World), 373 (Topic 15), Middle Eastern Languages and Cultures 321 (Topic: Gender and Art in Muslim World), 321 (Topic 31), Middle Eastern Studies 342 (Topic: Gender and Art in Muslim World), 342 (Topic 40), Religious Studies 358 (Topic: Gender and Art in Muslim World), 358 (Topic 20), Women's and Gender Studies 340 (Topic: Gender and Art in Muslim World), 340 (Topic 62). Prerequisite: Upperdivision standing.

**Topic 33: Archaeology of Greek Prehistory.** Same as Ancient History and Classical Civilization 325 (Topic 8), Classical Civilization 340 (Topic 8), and Middle Eastern Studies 342 (Topic 42). Explores the development of complex societies in ancient Greece by studying its prehistory through archaeology. Only one of the following may be counted: Ancient History and Classical Civilization 325 (Topic: Archaeology of Greek Prehistory), 325 (Topic 8), Classical Civilization 340 (Topic: Archaeology of Greek Prehistory), 340 (Topic 8), Middle Eastern Languages and Cultures 321 (Topic: Archaeology of Greek Prehistory), 321 (Topic 33), Middle Eastern Studies 320 (Topic: Archaeology of Greek Prehistory), 342 (Topic: Archaeology of Greek Prehistory), 342 (Topic 42), Persian 372 (Topic: Archaeology of Greek Prehistory).

**Topic 34: Sacred and Ceremonial Textiles.** Same as Anthropology 324L (Topic 29), Islamic Studies 372 (Topic 11), Religious Studies 358 (Topic 11), and Women's and Gender Studies 340 (Topic 57). Textiles and material objects indigenous to the Islamic world, and what they reveal about the culture of various Islamic societies. Only one of the following may be counted: Anthropology 324L (Topic 29), Islamic Studies 372 (Topic 11), Middle Eastern Languages and Cultures 321 (Topic: Sacred and Ceremonial Textiles), 321 (Topic 34), Middle Eastern Studies 358 (Topic: Sacred and Ceremonial Textiles), Religious Studies 358 (Topic: Sacred and Ceremonial Textiles), 358 (Topic 11), Textiles and Apparel 355 (Topic: Sacred and Ceremonial Textiles), Women's and Gender Studies 340 (Topic: Sacred and Ceremonial Textiles), Women's and Gender Studies 340 (Topic: Sacred and Ceremonial Textiles), 340 (Topic 57).

**Topic 35: Persian Art: Past and Present.** Same as Islamic Studies 373 (Topic 16) and Middle Eastern Studies 342 (Topic 43). Only one of the following may be counted: Islamic Studies 373 (Topic: Persian Art: Past and Present), 373 (Topic 16), Middle Eastern Languages and Cultures 321 (Topic: Persian Art: Past and Present), 321 (Topic 35), Middle Eastern Studies 342 (Topic: Persian Art: Past and Present), 342 (Topic 43). Prerequisite: Upper-division standing.

**Topic 36: Graffiti and Poster Art in the Islamic World.** Same as Anthropology 324L (Topic 59), Islamic Studies 373 (Topic 17), Middle Eastern Studies 342 (Topic 44), Religious Studies 358 (Topic 21), and Women's and Gender Studies 340 (Topic 67). Only one of the following may be counted: Anthropology 324L (Topic: Graffiti/Poster Art: Islam World), 324L (Topic 59), Islamic Studies 373 (Topic: Graffiti/ Poster Art: Islam World), 373 (Topic 17), Middle Eastern Languages and Cultures 321 (Topic: Graffiti/Poster Art: Islam World), 321 (Topic 36), Middle Eastern Studies 342 (Topic: Graffiti/Poster Art: Islam World), 342 (Topic 44), Religious Studies 358 (Topic: Graffiti/Poster Art: Islam World), 358 (Topic 21), Women's and Gender Studies 340 (Topic: Graffiti/Poster Art: Islam World), 340 (Topic 67). Prerequisite: Upper-division standing.

**Topic 37: Lost Languages and Decipherment.** Same as Ancient History and Classical Civilization 330 (Topic 4), Classical Civilization 348 (Topic 21), and Middle Eastern Studies 342 (Topic 45). Only one of the following may be counted: Ancient History and Classical Civilization 330 (Topic: Lost Languages & Decipherment), 330 (Topic 4), Classical Civilization 348 (Topic: Lost Languages & Decipherment), 348 (Topic 21), Linguistics 350 (Topic: Lost Languages & Decipherment), Middle Eastern Languages and Cultures 321 (Topic: Lost Languages & Decipherment), 321 (Topic 37), Middle Eastern Studies 342 (Topic: Lost Languages & Decipherment), 342 (Topic 45). Prerequisite: Upperdivision standing.

**Topic 38: Comparative Jewish Literature: Israel, France, and the United States.** Same as Jewish Studies 363 (Topic 22) and Middle Eastern Studies 342 (Topic 38). Only one of the following may be counted: Comparative Literature 323 (Topic: The Sacred and the Secular in Contemporary Jewish Literature), English 322 (Topic: The Sacred and the Secular in Contemporary Jewish Literature), Jewish Studies 363 (Topic 10), 363 (Topic 22), Middle Eastern Languages and Cultures 321 (Topic 8), 321 (Topic 38), Middle Eastern Studies 342 (Topic 8), 342 (Topic 38), Religious Studies 353 (Topic: The Sacred and the Secular in Contemporary Jewish Literature), 353 (Topic 3). Additional prerequisite: Upper-division standing.

#### MEL 323. Engaging the Middle East.

Three lecture hours a week for one semester. Prerequisite: Upper-division standing and Middle Eastern Languages and Cultures 301.

#### MEL 358Q. Supervised Research.

Supervised research experience in Middle Eastern languages, literatures and cultures. Individual instruction. May be repeated for credit. Prerequisite: Middle Eastern Languages and Cultures 301, and six hours of upper-division Arabic, Hebrew, Persian, or Turkish.

#### MEL 379. Conference Course.

Supervised individual study of selected problems in Middle Eastern languages and cultures. Conference course. May be repeated for credit. Prerequisite: Upper-division standing and consent of instructor.

#### MEL 679H. Honors Tutorial Course.

Supervised individual reading for one semester, followed by research and writing to produce a substantial paper on a literary or linguistic problem. Conference course for two semesters. Prerequisite: For 679HA, admission to the Middle Eastern Languages and Cultures Honors Program; for 679HB, Middle Eastern Languages and Cultures 679HA.

## Persian: PRS

### **Lower-Division Courses**

#### PRS 601C. Intensive Persian I.

First semester of intensive Persian language instruction. Six lecture hours a week for one semester. Persian 601C and 506 may not both be counted. Persian 601C and 507 may not both be counted.

#### PRS 506. First-Year Persian I.

Elementary colloquial Persian. Five lecture hours a week for one semester. Persian 601C and 506 may not both be counted.

#### PRS 507. First-Year Persian II.

Continuation of Persian 506. Elementary literary Persian. Five lecture hours a week for one semester. Persian 601C and 507 may not both be counted. Prerequisite: Persian 506 with a grade of at least C.

#### PRS 611C. Intensive Persian II.

Second semester of intensive Persian language instruction. Six lecture hours a week for one semester. Only one of the following may be counted: Persian 611C, 612C,512K. Only one of the following may be counted: Persian 611C, 612C, 512L. Prerequisite: Persian 601C or 507 with a grade of at least C.

#### PRS 612C. Intensive Persian for Heritage Speakers.

Designed for heritage speakers with prior exposure to Persian speaking and listening. This may include heritage Persian language speakers who have had little or no formal instruction in the language, and speakers who understand at a near-native level but have no knowledge or limited knowledge of reading and writing. Six lecture hours a week for one semester. Only one of the following may be counted: Persian 611C, 612C, 512K. Only one of the following may be counted: Persian 611C, 612C, 512L.

#### PRS 512K. Second-Year Persian I.

Not open to native speakers of Persian. Five lecture hours a week for one semester. Only one of the following may be counted: Persian 611C, 612C, 512K. Prerequisite: Persian 507 with a grade of at least C.

#### PRS 512L. Second-Year Persian II.

Not open to native speakers of Persian. Continuation of Persian 512K. Five lecture hours a week for one semester. Only one of the following may be counted: Persian 611C, 612C, 512L. Prerequisite: Persian 512K with a grade of at least C.

#### PRS 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Persian.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Middle Eastern Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### PRS 322K. Intermediate Persian I.

Not open to native speakers of Persian. First semester of intermediate Persian language instruction. Three lecture hours a week for one semester. Prerequisite: Persian 611C, 612C, or 512L with a grade of at least C.

#### PRS 322L. Intermediate Persian II.

Not open to native speakers of Persian. Second semester of intermediate Persian language instruction. Three lecture hours a week for one semester. Prerequisite: Persian 322K with a grade of at least C.

# PRS 329. Topics in Persian Language, Literature, and Culture.

Study of various aspects of Persian linguistics, literature, and culture. Conducted in Persian. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Persian 612C or 322K.

#### Topic 1: Ferdowsi's Shahnameh.

Topic 2: Sa'di's Golestan. Additional prerequisite: Persian 512L. Topic 3: Hafez's Ghazals.

- Topic 4: Sadeq Hedayat and Twentieth-Century Persian Fiction.
- Topic 5: Forugh Farrokhzad and Modernist Persian Poetry.
- Topic 6: Persian Prose Nonfiction.

**Topic 7: The Classics of Persian Poetry.** Conducted in Persian. Only one of the following may be counted: Comparative Literature 323 (Topic: Classics of Persian Poetry), Middle Eastern Languages and Cultures 321 (Topic: Classics of Persian Poetry), Middle Eastern Studies 342 (Topic: Classics of Persian Poetry), Persian 329 (Topic 7). Additional prerequisite: Persian 611C or 612C with a grade of at least C.

**Topic 8: Iranian Cinema**. Only one of the following may be counted: Comparative Literature 323 (Topic: Iranian Cinema), Middle Eastern Languages and Cultures 321 (Topic: Iranian Cinema), Middle Eastern Studies 342 (Topic: Iranian Cinema), Persian 329 (Topic 8).

# PRS 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Persian.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Middle Eastern Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### PRS 130D. Persian across Disciplines.

Students read and discuss Persian language materials related to the subject matter of another designated course. One lecture hour a week for one semester. No more than three semester hours may be counted toward the major in either Middle Eastern Studies or Middle Eastern Languages and Culture. May be repeated for credit. Prerequisite: Upperdivision standing, Persian 322L, and consent of instructor.

# PRS 369. Conference Course in Persian Language and Literature.

Supervised individual study of selected problems in Persian language or literature. Conference course. May be repeated for credit. Prerequisite: Nine semester hours of upper-division coursework in Persian and consent of instructor.

#### PRS 679H. Honors Tutorial Course.

Supervised individual reading for one semester, followed by research and writing to produce a substantial paper. Conference course for two semesters. Prerequisite: For 679HA, upper-division standing and admission to the Persian Language and Literature Honors Program; for 679HB, Persian 679HA.

### Turkish: TUR

# **Lower-Division Courses**

#### TUR 601C. Intensive Turkish I.

First semester of intensive Turkish language instruction. Six lecture hours a week for one semester. Turkish 601C and 506 may not both be counted. Turkish 601C and 507 may not both be counted.

#### TUR 506. First-Year Turkish I.

Modern Standard Turkish. Five lecture hours a week for one semester. Turkish 601C and 506 may not both be counted.

#### TUR 507. First-Year Turkish II.

Modern Standard Turkish. Continuation of Turkish 506. Five lecture hours a week for one semester. Turkish 601C and 507 may not both be counted. Prerequisite: Turkish 506 with a grade of at least C.

#### TUR 611C. Intensive Turkish II.

Second semester of intensive Turkish language instruction. Six lecture hours a week for one semester. Turkish 611C and 412K may not both be counted. Turkish 611C and 412L may not both be counted. Prerequisite: Turkish 601C or 507 with a grade of at least C.

#### TUR 412K. Second-Year Turkish I.

Conversational Turkish and readings in contemporary Turkish literature and newspapers. Review of the grammar covered in Turkish 506 and 507, and introduction of more complex grammatical patterns. Four lecture hours a week for one semester. Turkish 611C and 412K may not both be counted. Prerequisite: Turkish 601C or 507 with a grade of at least C.

#### TUR 412L. Second-Year Turkish II.

Continuation of Turkish 412K. Four lecture hours a week for one semester. Turkish 611C and 412L may not both be counted. Prerequisite: Turkish 412K with a grade of at least C.

#### TUR 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Turkish.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Middle Eastern Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### TUR 320K. Intermediate Turkish I.

Not open to native speakers of Turkish. Intermediate to high-level Turkish in four basic language skills: speaking, listening, reading, and writing. Turkish culture. Three lecture hours a week for one semester. Prerequisite: Turkish 611C or 412L with a grade of at least C.

#### TUR 320L. Intermediate Turkish II.

Not open to native speakers of Turkish. Continuation of Turkish 320K. Three lecture hours a week for one semester. Prerequisite: Turkish 320K with a grade of at least C.

#### TUR 325K. Advanced Turkish I.

Restricted to nonnative speakers of Turkish. Three lecture hours a week for one semester. Turkish 325K and 329 (Topic: Advanced Turkish I) may not both be counted. Prerequisite: Turkish 320L with a grade of at least C.

#### TUR 325L. Advanced Turkish II.

Restricted to nonnative speakers of Turkish. Advanced Turkish language instruction. Three lecture hours a week for one semester. Turkish 325L and 329 (Topic: Advanced Turkish II) may not both be counted. Prerequisite: Turkish 325K or the equivalent.

# TUR 329. Topics in Turkish Language, Literature, and Culture.

Conducted in Turkish. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and Turkish 611C or 412L with a grade of at least C.

# TUR 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Turkish.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Middle Eastern Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### TUR 130D. Turkish across Disciplines.

Students read and discuss Turkish language materials related to the subject matter of another designated course. One lecture hour a week for one semester. No more than three semester hours may be counted toward the major in either Middle Eastern Studies or Middle Eastern Languages and Culture. May be repeated for credit. Prerequisite: Upperdivision standing, Turkish 320L, and consent of instructor.

# TUR 369. Conference Course in Turkish Language and Literature.

Supervised individual study of selected problems in Turkish language or literature. Conference course. May be repeated for credit. Prerequisite: Upper-division standing and consent of instructor.

#### TUR 679H. Honors Tutorial Course.

Supervised individual reading for one semester, followed by research and writing to produce a substantial paper. Conference course for two semesters. Prerequisite: For 679HA, admission to the Turkish Language and Literature Honors Program; for 679HB, Turkish 679HA.

# **Department of Philosophy**

There are several courses offered each year in philosophy that should be of interest to undergraduates who have strong interests outside philosophy. In addition to the introductory courses (Philosophy 301, 304, 305, and 310) and the basic sequence in the history of philosophy (Philosophy 329K and 329L), the courses listed below are of particular relevance to students who are interested in the indicated areas.

- Business: Philosophy 312, 322, and 325L
- Communications: Philosophy 311, 312, 313, and 332
- · Computer science: Philosophy 313K, 344K, 358, 363, and 363L
- Law: Philosophy 311, 312, 313, 318, 325K, 342, and 347
- · Linguistics: Philosophy 313K, 332, 344K, and 358
- Literature: Philosophy 346, 348, 349, 356, 361K, and 366K
- Mathematics: Philosophy 313K, 344K, 344M, and 358
- Natural sciences: Philosophy 322, 363, and 363
- Premedicine and predentistry: Philosophy 312, 318, 322, 325M, and 363
- · Social sciences: Philosophy 322, 363, and 363L

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

# Philosophy: PHL

### **Lower-Division Courses**

#### PHL 301 (TCCN: PHIL 1301). Introduction to Philosophy.

Primarily for lower-division students. A survey of principal topics and problems in areas such as ethics, theory of knowledge, and philosophy of religion. Three lecture hours or two lecture hours and one laboratory/ discussion hour a week for one semester. Philosophy 301 and 610QA may not both be counted.

#### PHL 301K (TCCN: PHIL 2316). Ancient Philosophy.

Same as Classical Civilization 304C (Topic 6). Primarily for lower-division students. An introduction to the philosophical achievements of the ancient world, concentrating on Plato and Aristotle. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Classical Civilization 304C (Topic: Ancient Philosophy), 304C (Topic 6), Philosophy 301K.

#### PHL 301L. Early Modern Philosophy.

Primarily for lower-division students. An introduction to the philosophical achievements of the seventeenth and eighteenth centuries, concentrating on such figures as Descartes, Hume, and Kant. Three lecture hours or two lecture hours and one laboratory/discussion hour a week for one semester.

#### PHL 302. World Philosophy.

Primarily for lower-division students. Basic issues of philosophy in Western and non-Western traditions, such as the nature of philosophy, its relation to religion and science, the self, knowledge, and virtue. Three lecture hours or two lecture hours and one laboratory/discussion hour a week for one semester. Asian Studies 301M (Topic 7: World Philosophy) and Philosophy 302 may not both be counted.

#### PHL 302C. Ethics and Enlightenment.

Primarily for lower-division students. A study of non-Western ethics, especially in Hindu and Buddhist traditions. Three lecture hours or two lecture hours and one laboratory/discussion hour a week for one semester.

#### PHL 303. Human Nature.

Primarily for lower-division students. Theories of human nature, such as those of Plato, Christianity, Marxism, and existentialism. Modern psychological and biological theories are included, as the interplay of nature and nurture in determining human conduct is explored. Three lecture hours or two lecture hours and one laboratory/discussion hour a week for one semester.

#### PHL 303M. Mind and Body.

Primarily for lower-division students. Introduction to philosophical issues about the nature of mind and its relation to body. What is mind? Do people have free will? How does psychology relate to neuroscience? Three lecture hours or two lecture hours and one laboratory/discussion hour a week for one semester.

#### PHL 304. Contemporary Moral Problems.

Primarily for lower-division students. Philosophical examination of selected moral problems arising out of contemporary society and culture. Three lecture hours or two lecture hours and one laboratory/ discussion hour a week for one semester.

# PHL 305 (TCCN: PHIL 2321). Introduction to the Philosophy of Religion.

Same as Core Texts and Ideas 310 (Topic 3) and Religious Studies 305. A critical examination of various conceptions of God and of the relationship of the human and the divine. Three lecture hours or two lecture hours and one laboratory/discussion hour a week for one semester. Only one of the following may be counted: Core Texts and Ideas 310 (Topic: Introduction to the Philosophy of Religion), 310 (Topic 3), Philosophy 305, Religious Studies 305.

#### PHL 306. Philosophical Thinkers.

Primarily for lower-division students. An introduction to major areas of philosophy through the study of selected philosophical thinkers. Three lecture hours or two lecture hours and one laboratory/discussion hour a week for one semester. May be repeated for credit when the topics vary.

#### PHL 310. Knowledge and Reality.

An introduction to basic issues in epistemology and metaphysics. Three lecture hours or two lecture hours and one laboratory/discussion hour a week for one semester. Philosophy 310 and 610QA may not both be counted.

#### PHL 610Q. Problems of Knowledge and Valuation.

Restricted to students in the Plan II Honors Program. Methods and aims of selected sciences, arts, and philosophy in the attainment of knowledge and in providing the basis for valuation. Three lecture hours and one discussion hour a week for two semesters. Philosophy 301 and 610QA may not both be counted; Philosophy 310 and 610QA may not both be counted; Philosophy 610QB and 318 may not both be counted. Prerequisite: For 610QA, admission to the Plan II Honors Program; for 610QB, Philosophy 610QA.

#### PHL 311. Argument.

Argument as a kind of discourse: deductive and inductive arguments; principles of reasoning; fallacies; practical applications. Three lecture hours or two lecture hours and one laboratory/discussion hour a week for one semester.

#### PHL 312 (TCCN: PHIL 2303). Introduction to Logic.

Logical structure of sentences and arguments; elementary symbolic methods; applications. Three lecture hours or two lecture hours and one laboratory/discussion hour a week for one semester. May not be counted by students with prior credit for Philosophy 313, 313K, 313Q, or 344K.

#### PHL 313. Introductory Symbolic Logic.

Introduction to symbolic logic (through first-order predicate logic); interpretations; formal proofs, consistency; some practical applications. Three lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Computer Science 313H, 313K, Philosophy 313, 313K, 313Q.

#### PHL 313K. Logic, Sets, and Functions.

Sets, relations, functions, sentential and predicate logic, proof techniques, algorithms, and elementary metatheory. Mathematically oriented. Three lecture hours and one laboratory hour a week for one semester. Only one of the following may be counted: Computer Science 313H, 313K, Philosophy 313, 313K, 313Q.

#### PHL 313Q. Logic and Scientific Reasoning.

Introduction to formal proofs, semantics, quantifiers, inductive methods, decision theory, and scientific reasoning. Three lecture hours and one laboratory hour a week for one semester. Only one of the following may be counted: Computer Science 313H, 313K, Philosophy 313, 313K, 313Q. Philosophy 313Q and Tutorial Course 310 may not both be counted. Prerequisite: Admission to the Plan II Honors Program.

#### PHL 315F. Philosophy and Film.

Formulation, analysis, and criticism of philosophical ideas in selected films. Three lecture hours or two lecture hours and one discussion hour a week for one semester.

#### PHL 315L. Philosophy and Literature.

Formulation, analysis, and criticism of philosophical ideas in selected works of literature. Three lecture hours or two lecture hours and one discussion hour a week for one semester.

#### PHL 316K. Science and Philosophy.

Introduction to scientific method, including discussion of the nature and goals of science. Three lecture hours or two lecture hours and one laboratory/discussion hour a week for one semester. May not be counted by students with credit for Philosophy 363.

#### PHL 317K. Introduction to the Philosophy of the Arts.

Classic issues in the philosophy of art and beauty, illustrated from the fine arts and contemporary media: literature, drama, music, painting, film, and television. Three lecture hours or two lecture hours and one discussion hour a week for one semester.

#### PHL 318 (TCCN: PHIL 2306). Introduction to Ethics.

Study of basic principles of the moral life, with critical examination of traditional and contemporary theories of the nature of goodness, happiness, duty, and freedom. Three lecture hours or two lecture hours and one laboratory/discussion hour a week for one semester. Philosophy 610QB and 318 may not both be counted.

# PHL 318K (TCCN: PHIL 2307). Introduction to Political Philosophy.

Views of major political philosophers on humanity, nature, and society; discussions of contemporary political ideologies. Three lecture hours or two lecture hours and one laboratory/discussion hour a week for one semester.

#### PHL 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Philosophy.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Philosophy. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### PHL 321K. Theory of Knowledge.

Systematic and detailed study of major issues in the theory of knowledge, such as the distinction between knowledge and belief, the criteria of knowledge, the justification of knowledge-claims, and perception. Three lecture hours a week for one semester. Prerequisite: Six semester hours of coursework in philosophy.

#### PHL 322. Science and the Modern World.

The historical development and impact of scientific ideas through the modern period to the present. Three lecture hours or two lecture hours and one discussion hour a week for one semester.

#### PHL 322K. History of Ethics.

Survey of ethical theories from ancient times through the nineteenth century. Three lecture hours a week for one semester. Prerequisite: At least three semester hours of coursework in philosophy.

#### PHL 323K. Metaphysics.

Problems of substance, change, categories of being, mind, body, space and time, approached either systematically or historically. Three lecture hours a week for one semester. Prerequisite: Six semester hours of coursework in philosophy.

#### PHL 323M. Philosophy of Mind.

Problems concerning the nature of mind and mental phenomena: the relation between mind and body, knowledge of other minds, the computational model of mind, mental causation, intentionality, and consciousness. Three lecture hours a week for one semester. Prerequisite: Six semester hours of coursework in philosophy.

#### PHL 325C. Environmental Ethics.

Moral issues concerning the relation of human beings to the environment, including biodiversity, resource depletion, and animal rights. Three lecture hours and one discussion hour a week for one semester.

#### PHL 325K. Ethical Theories.

Major traditional and contemporary ethical theories discussed and critically examined. Three lecture hours a week for one semester. Prerequisite: Six semester hours of coursework in philosophy.

#### PHL 325L. Business, Ethics, and Public Policy.

Issues in ethics and politics that are relevant to the organization of business and industry and the distribution of power in society;

topics include the role of industry; concepts of profit, property, and moral responsibility. Three lecture hours or two lecture hours and one laboratory/discussion hour a week for one semester.

#### PHL 325M. Medicine, Ethics, and Society.

Moral, legal, religious, and political implications of developments in medicine; topics include abortion, euthanasia, sterilization, psychosurgery, genetic engineering; concepts of health, cure, insanity, and death. Three lecture hours or two lecture hours and one laboratory/ discussion hour a week for one semester.

#### PHL 327. Contemporary Philosophy.

Explores the currents of contemporary thought by focusing on philosophical areas, movements, or trends. Three lecture hours or two lecture hours and one discussion hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 1: Perception. Examines philosophical puzzles about perceptual experiences of the world. Philosophy 327 (Topic 1) and 375M (Topic: Perception) may not both be counted. Prerequisite: Upper-division standing and three semester hours of coursework in philosophy. Topic 2: Contemporary Christian Philosophy. Study of recent work in philosophy written from a Christian point of view or that examines philosophical questions that arise within the framework of the Christian faith. Philosophy 327 (Topic: Contemporary Christian Philosophy) and 327 (Topic 2) may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 4: Interpretation and Meaning.** Only one of the following may be counted: Philosophy 327 (Topic: Interpretation and Meaning), 327 (Topic 4), 375M (Topic: Interpretation and Meaning). Additional prerequisite: Upper-division standing.

#### PHL 328. Nineteenth-Century Philosophy.

Major figures in nineteenth-century European philosophy, including Hegel, Schopenhauer, Kierkegaard, Nietzsche, and Mill. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### PHL 329K. History of Ancient Philosophy.

Same as Classical Civilization 348 (Topic 4). Development of Western philosophy from the pre-Socratics to the early Christian era; emphasis on Plato and Aristotle. Three lecture hours and one discussion hour a week for one semester. Classical Civilization 348 (Topic 4) and Philosophy 329K may not both be counted. Prerequisite: Six semester hours of coursework in philosophy.

#### PHL 329L. Early Modern Philosophy: Descartes to Kant.

Three lecture hours and one discussion hour a week for one semester. Prerequisite: Six semester hours of coursework in philosophy.

#### PHL 329M. Philosophical Classics.

Intensive study of one or two important philosophers or philosophical works. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and at least three semester hours of coursework in philosophy.

**Topic 1: Kant's Critique of Pure Reason.** An intensive study of Kant's Critique of Pure Reason, focusing especially on his "Copernican revolution," his theories of categories and concepts, and his rejection of metaphysics.

# PHL 129S, 229S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Philosophy.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Philosophy. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### PHL 329U. Perspectives on Science and Mathematics.

An examination of five notable episodes in the history of science: Galileo's conflict with the Catholic Church, Isaac Newton's formulation of the laws of motion, Charles Darwin's proposal of the theory of evolution by natural selection, the development of the atomic bomb, and the discovery of the double helix structure of DNA. Three lecture hours a week for one semester. Only one of the following may be counted: History 329U, 366N (Topic: Perspectives on Science and Mathematics), Philosophy 329U. Prerequisite: Upper-division standing and consent of instructor.

#### PHL 332. Philosophy of Language.

Contemporary theories of meaning and linguistic structure, and their relationships to epistemology, metaphysics, and ethics. Three lecture hours a week for one semester. Prerequisite: Six semester hours of coursework in philosophy.

#### PHL 334K. Modern Thinkers.

Critical study of the philosophical implications of the works of selected modern thinkers from the nineteenth century to the present. Three lecture hours or two lecture hours and one discussion hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites may vary with the topic.

**Topic 1: Modernity and Postmodernity.** Three lecture hours or two lecture hours and one laboratory/discussion hour a week for one semester.

#### PHL 342. Political Philosophy.

Critical examination of leading theories of the state, including analysis of such concepts as sovereignty, obligation, rights, and freedom. Three lecture hours or two lecture hours and one laboratory/discussion hour a week for one semester. May be repeated for credit when the topics vary.

**Topic 1: Natural Law Theory.** Same as Government 335M (Topic 12). Study of the fundamental moral principles that are built into the design of human nature and lie at the roots of conscience. Only one of the following may be counted: Government 335M (Topic: Natural Law Theory), 335M (Topic 12), and Philosophy 342 (Topic: Natural Law Theory), Philosophy 342 (Topic 1). Additional prerequisite: Upperdivision standing and six semester hours of lower-division coursework in government.

#### PHL 344K. Intermediate Symbolic Logic.

Same as Mathematics 344K. A second-semester course in symbolic logic: formal syntax and semantics, basic metatheory (soundness, completeness, compactness, and Loewenheim-Skolem theorems), and further topics in logic. Three lecture hours a week for one semester. Prerequisite: Philosophy 313, 313K, or 313Q.

#### PHL 344M. Philosophy of Mathematics.

Philosophical issues concerning mathematics and its foundations, such as the correlation of mathematics to logic, mathematical truth, and mathematical knowledge. Three lecture hours a week for one semester.

#### PHL 346. Aesthetics.

Study of selected topics in the philosophy of art; may be restricted to one or several specific art forms or media: literature, painting, music, film,

television, or theatre. Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### PHL 346K. Aesthetics.

The nature and purpose of art and the aesthetic experience. Three lecture hours a week for one semester. Philosophy 346 and 346K may not both be counted.

#### PHL 347. Philosophy of Law.

The significance and function of law in political and ethical contexts; comparison of common and statutory to scientific and moral law; readings from among Plato, Kant, Hegel, Bentham, Austin, Hart, Dworkin, Feinberg, and others. Three lecture hours or two lecture hours and one laboratory/discussion hour a week for one semester.

#### PHL 348. Asian Philosophy.

Comparative and historical studies in the philosophical and religious traditions of the East. Three lecture hours or two lecture hours and one laboratory/discussion hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Argumentation East and West.** Traces parallel developments in the theory of argumentation through major figures and texts in both ancient Greek and Indian traditions, probing differences as well as convergences. Philosophy 348 (Topic: Argumentation East and West) and 348 (Topic 1) may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 2: Indian Philosophies.** Same as Asian Studies 372 (Topic 2: Indian Philosophies) and Religious Studies 341 (Topic 1: Indian Philosophies).

#### PHL 349. History of Medieval and Renaissance Philosophy.

Philosophical thought from Augustine through Cusanus and Vico, with emphasis on its cultural bearing. Three lecture hours a week for one semester. Prerequisite: Three semester hours of coursework in philosophy.

#### PHL 354. Philosophy in Context.

Focuses on philosophical thinkers and works with attention to their historical or religious context. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

**Topic 2: History of Christian Philosophy.** Same as Core Texts and Ideas 335 (Topic 2). Examines the history of Christian philosophy through classic Christian thought, concerning what can be known and how people should live. Only one of the following may be counted: Core Texts and Ideas 335 (Topic: History of Christian Philosophy), 335 (Topic 2), Philosophy 354 (Topic: History of Christian Philosophy), 354 (Topic 2). Prerequisite: Upper-division standing.

**Topic 5: Origins of Liberalism**. Same as Core Texts and Ideas 335 (Topic 4). Only one of the following may be counted: Core Texts and Ideas 335 (Topic: Origins of Liberalism), 335 (Topic 4), European Studies 346 (Topic: Origins of Liberalism), Philosophy 354 (Topic: Origins of Liberalism), 354 (Topic 5). Additional prerequisite: Upperdivision standing.

**Topic 7: Spinoza and Modernity.** Same as Core Texts and Ideas 321F, European Studies 346 (Topic 21), History 362P, Jewish Studies 364 (Topic 9), and Religious Studies 357 (Topic 8). Introduction to the core of Spinoza's writings and the diverse reactions they have elicited. Examines Spinoza's refusal of mind-body dualism, as well as a transcendent god or ideal as a way of understanding Spinoza's concepts and ideas. Three lecture hours a week for one semester. Only one of the following may be counted: Core Texts and Ideas 335 (Topic: Spinoza and Modernity), 321F, European Studies 346 (Topic: Spinoza and Modernity), 346 (Topic 21), 347 (Topic: Spinoza

and Modernity), History 362G (Topic: Spinoza and Modernity), 362P, Jewish Studies 364 (Topic: Spinoza and Modernity), 364 (Topic 9), Philosophy 334K (Topic: Spinoza and Modernity), 354 (Topic: Spinoza and Modernity), 354 (Topic 7), Religious Studies 357 (Topic: Spinoza and Modernity), 357 (Topic 8). Additional prerequisite: Upper-division standing.

#### PHL 356. Philosophy of Religion.

Meaning and function of religion; religious belief and its validity; religious values in the modern world. Three lecture hours or two lecture hours and one laboratory/discussion hour a week for one semester. May be repeated for credit when the topics vary.

**Topic 2: Yoga as Philosophy and Practice.** Same as Religious Studies 341G. Three lecture hours a week for one semester. Only one of the following may be counted: Asian Studies 372 (Topic: Yoga as Philosophy and Practice), Philosophy 356 (Topic: Yoga as Philosophy and Practice), 356 (Topic 2), Religious Studies 341G. Prerequisite: Upper-division standing.

#### PHL 358. Philosophical Logic.

Issues in philosophical logic and its applications, such as theories of meaning, logical paradoxes, epistemic logic, deontic logic, modal logic, existence, and identity. Three lecture hours a week for one semester. Prerequisite: Philosophy 313, 313K, or 313Q.

#### PHL 361K. Philosophy in Literature.

Formulation, analysis, and criticism of philosophical ideas in selected literary works. Three lecture hours a week for one semester.

#### PHL 363. Scientific Method.

History, exposition, and analysis of such fundamental concepts in the natural and social sciences as explanation, prediction, discovery, confirmation, laws, hypotheses, theories. Three lecture hours a week for one semester.

#### PHL 363L. Topics in Philosophy of Science.

Three lecture hours or two lecture hours and one discussion hour a week for one semester. Additional hours may be required for some topics. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 1: The Philosophy of Biology. Philosophy 363L (Topic 1) and 363L (Topic: Philosophy of Biology) may not both be counted. Topic 2: The Outer Limits of Reason. Examines fundamental questions that appear to transcend the capacities of reason such as semantic paradoxes, theseus' ship, vagueness, infinities, computational intractability, quantum mechanics, fine-tuning arguments, and why mathematics applies to the physical world. Three lecture hours a week for one semester. Philosophy 363L (Topic: Outer Limits of Reason) and 363L (Topic 2) may not both be counted.

**Topic 4: The Philosophy of Geometry.** Philosophy 363L (Topic: Philosophy of Geometry) and 363L (Topic 4) may not both be counted. Prerequisite: Upper-division standing.

#### PHL 365. Selected Problems in Philosophy.

The equivalent of three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 2: Introduction to Cognitive Science.** Same as Cognitive Science 360 (Topic 1: Introduction to Cognitive Science) and Linguistics 373 (Topic 7: Introduction to Cognitive Science).

**Topic 5: Contemporary American Social Theory.** Same as Government 335M (Topic 9). Only one of the following may be counted: Government 335M (Topic: Social Theory), 335M (Topic 9), Philosophy

365 (Topic 5), Sociology 352M (Topic 8). Additional prerequisite: Upper-division standing and six semester hours of lower-division coursework in government.

Topic 6: Process Philosophy and Pragmatism. Philosophy 365 (Topic: Process Philosophy and Pragmatism) and 365 (Topic 6) may not both be counted. Additional prerequisite: Upper-division standing. Topic 7: Times and Events. Examines the way times and events are represented in thought and spoken language. Only one of the following may be counted: Cognitive Science 360 (Topic: Times and Events), Linguistics 350 (Topic: Times and Events), Philosophy 365 (Topic: Times and Events), 365 (Topic 7). Prerequisite: Upper-division standing and three semester hours of philosophy coursework.

#### PHL 366K. Existentialism.

Existentialism and its relationship to literature, psychoanalysis, and Marxism. Three lecture hours or two lecture hours and one laboratory/ discussion hour a week for one semester.

#### PHL 371H. Philosophy Honors.

Close study of major works of philosophy. Three lecture hours and one discussion hour a week for one semester. May be repeated for credit. Prerequisite: Six semester hours of coursework in philosophy and a University grade point average of at least 3.50.

#### PHL 375M. Major Seminar.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Nine semester hours of coursework in philosophy.

**Topic 1: Philosophy and Feminism.** Only one of the following may be counted: Philosophy 327 (Topic: Philosophy and Feminism), 375M (Topic: Philosophy and Feminism), 375M (Topic 1), Women's and Gender Studies 345 (Topic: Philosophy and Feminism).

#### PHL 679H. Honors Tutorial Course.

Supervised individual reading for one semester, followed by research and writing to produce a substantial paper on a special topic in philosophy, to be completed during the second semester. Conference course for two semesters. Prerequisite: For 679HA, admission to the Philosophy Honors Program; for 679HB, Philosophy 679HA.

#### PHL 379K. Conference Course.

Intensive tutorial study of selected problems in philosophy. Conference course. May be repeated for credit. Prerequisite: Nine semester hours of upper-division coursework in philosophy and consent of instructor and the undergraduate adviser in philosophy.

# **Plan II Honors Program**

### Social Science: S S

#### **Lower-Division Courses**

#### S S 301. Honors Social Science.

An introduction to the study of the individual, society, or culture using the methods of one of the social sciences. Three lecture hours a week for one semester. With consent of the director of Plan II, may be repeated once for elective credit. Prerequisite: Admission to the Plan II Honors Program.

#### S S 302C. Honors Social Science: Methods and Theory.

Restricted to students in the Plan II Honors Program. An introduction to the study of the individual, society, or culture using the methods and theories of one of the Social Sciences. Three lecture hours a week for one semester. Social Science 301 and 302C may not both be counted.

#### S S 302D. Honors Social Science: Psychology.

Restricted to students in the Plan II Honors Program. An introduction to the study of the individual, society, or culture using the methods of the social science discipline of Psychology. Three lecture hours a week for one semester. Social Science 301 and 302D may not both be counted.

#### S S 302E. Honors Social Science: Anthropology.

Restricted to students in the Plan II Honors Program. An introduction to the study of the individual, society, or culture using the methods of the social science discipline of Anthropology. Three lecture hours a week for one semester. Social Science 301 and 302E may not both be counted.

#### S S 302F. Honors Social Science: Economics.

Restricted to students in the Plan II Honors Program. An introduction to the study of the individual, society, or culture using the methods of the social science discipline of Economics. Three lecture hours a week for one semester. Social Science 301 and 302F may not both be counted.

# Upper-Division Courses Tutorial Course: T C

### **Lower-Division Courses**

#### T C 302. First-Year Signature Course: Plan II.

Restricted to first-year Plan II students. Small-group seminar involving reading, discussion, writing, and oral reporting around a central interdisciplinary topic. Designed to introduce undergraduates to scholarly analysis from an interdisciplinary perspective. Includes an introduction to University resources, such as research facilities, museums, and attendance at University lectures or performances as assigned. Multiple sections may be offered in the fall and spring with various topics and instructors. Three lecture hours a week for one semester. Some sections may require additional meeting times. Only one of the following may be counted: Tutorial Course 302, Undergraduate Studies 302, or 303.

#### T C 303C. Plan II World Literature Part I.

Restricted to students in the Plan II Honors Program. Reading of masterpieces of world literature and intensive training in writing and in critical analysis of literature. Three lecture hours a week for one semester. Only one of the following may be counted: Tutorial Course 303C, 603A; English 303C, 603A; Rhetoric and Writing 306, 306Q.

#### T C 303D. Plan II World Literature Part II.

Restricted to students in the Plan II Honors Program. Reading of masterpieces of world literature and intensive training in writing and in critical analysis of literature. Three lecture hours a week for one semester. Only one of the following may be counted: Comparative Literature 315, English 303D, 603B, 316N, Tutorial Course 303D, 603B Prerequisite: Tutorial Course 303C or English 303C.

#### T C 310. Modes of Reasoning.

Introduction to forms of quantitative reasoning: computer science, game theory, operations research, or statistics and probability. Three lecture hours a week for one semester. Philosophy 313Q and Tutorial Course 310 may not both be counted. Prerequisite: Admission to the Plan II Honors Program.

### **Upper-Division Courses**

#### T C 325. Topics in the Arts and Sciences.

Analysis of various topics within the arts and sciences through reading, research, written reports, and discussion. Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

Prerequisite: Upper-division standing in the Plan II Honors Program or consent of instructor; additional prerequisites vary with the topic.

#### T C 125K. Subjects in the Arts and Sciences.

Analysis of subjects in the arts, sciences, and social sciences through reading, discussion, and lectures. The equivalent of one lecture hour a week for one semester. May be repeated for credit. Offered on the pass/ fail basis only. Prerequisite: Upper-division standing in the Plan II Honors Program or consent of instructor.

# T C 126. Plan II/Knowledge Is Power Program Charter Schools Partnership.

Restricted to students in the Plan II Honors Program. Mentorship of younger students attending an Austin-area Knowledge Is Power Program (KIPP) school. Through mentoring and class meetings, students will be deeply immersed in issues related to education reform, (in)equality of educational opportunity, and in promising strategies, such as those used by KIPP, for addressing such issues. The equivalent of one lecture hour and two hours of service a week for one semester. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: Consent of instructor.

#### T C 127. Civic Viewpoints.

Restricted to students in the Plan II Honors Program. Explores civic engagement and innovative solutions for societal justice. The equivalent of one lecture hour a week for one semester. May be repeated for credit. Offered on the pass/fail basis only.

#### T C 330. Special Topics in Plan II.

Restricted to Plan II majors. Three lecture hours a week for one semester, with additional hours to be arranged. May be repeated for credit when the topics vary. Prerequisite: Consent of instructor.

#### T C 358. Plan II Junior Seminar.

Restricted to students in the Plan II Honors Program. Seminar sections of about fifteen students. The subjects vary, but in each the attempt is made through careful reading, discussion, and written work to analyze and compare varied approaches to topics of lasting importance. Three lecture hours a week for one semester. Students must take this course twice with different topics to fulfill degree requirements. May be repeated for credit when topics vary. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

#### T C 359T. Essay Course.

Directed reading followed by the writing of an essay. Conference course, with additional hours to be arranged. Prerequisite: Two semesters of Tutorial Course 358 (or 357) and consent of the director.

#### T C 660H. Thesis Course: Honors.

Directed reading followed by the writing of a substantial essay. Conference course for two semesters, with additional hours to be arranged. Prerequisite: For 660HA, two semesters of Tutorial Course 358 (or 357) and consent of the director; for 660HB, Tutorial Course 660HA.

# **Department of Psychology**

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

# **Psychology: PSY**

# **Lower-Division Courses**

# PSY 301 (TCCN: PSYC 2301). Introduction to Psychology.

Basic problems and principles of human experience and behavior. Three lecture hours a week for one semester, or the equivalent in independent study.

# PSY 304 (TCCN: PSYC 2308). Introduction to Child Psychology.

General introduction to physical, social, and cognitive development from conception onward. Three lecture hours a week for one semester. Only one of the following may be counted: Psychology 304, 333D, Women's and Gender Studies 333D, 345 (Topic 6). Prerequisite: Psychology 301 with a grade of at least C.

# PSY 305. Introduction to Cognitive Psychology.

Introduction to the study of how people perceive, act, communicate, and reason. Three lecture hours a week for one semester. Prerequisite: Psychology 301 with a grade of at least C.

# PSY 306. Introduction to Human Sexuality.

Introduction to the science of sex and mating. Provides an overview of the psychological, biological, and social factors that contribute to sexual well-being and human sexual attraction. Three lecture hours a week for one semester. Psychology 306 and 346K may not both be counted.

# PSY 308. Biopsychology.

Introduction to the biological bases of psychological processes and behavior. Overview of the physiology and anatomy of the nervous system, followed by a survey of brain mechanisms of perception, cognition, learning, and emotion; biological perspectives on drug action and mental disease. Three lecture hours a week for one semester. Prerequisite: Psychology 301 with a grade of at least C.

# PSY 309 (TCCN: PSYC 2316). Personality.

Research and theory concerning personality structure, dynamics, development, and assessment. Three lecture hours a week for one semester. Prerequisite: Psychology 301 with a grade of at least C.

# PSY 317 (TCCN: PSYC 2317). Statistical Methods in Psychology.

Recommended for majors who plan to do graduate work in psychology or related fields. Measures of central tendency and variability; statistical inference; correlation and regression. Three lecture hours a week for one semester. Prerequisite: Psychology 301 with a grade of at least C.

# PSY 418. Statistics and Research Design.

Survey of statistics, including central tendency, variability and inference, and scientific methodology used in psychological research. Three lecture hours and two discussion hours a week for one semester. Prerequisite: Psychology 301 with a grade of at least C and credit for one of the following: African and African Diaspora Studies 302M, Educational Psychology 371, Mathematics 302, 303D, 403K, 305G, 408C, 408K, 316; Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 328M (or Statistics and Scientific Computation 328M).

# PSY 319K (TCCN: PSYC 2319). Social Psychology.

Theory and research on the analysis of human conduct in social settings. Three lecture hours a week for one semester. Prerequisite: Psychology 301 with a grade of at least C.

# PSY 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Psychology.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Psychology. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

# **Upper-Division Courses**

# **PSY 323. Perception.**

Theory and research in the ways we extract information from the environment. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 323P. Perceptual Systems: Neurons, Behavior, and Evolution.

An introduction to perceptual systems, with an emphasis on perception in human and nonhuman primates. Subjects include the physics of perceptual stimuli, the neural processing of perceptual information, the performance of human and other primates in perceptual tasks, and the evolution of perceptual systems. Three lecture hours a week for one semester. Psychology 323P and 341K (Topic: Perceptual Systems: Neurons/Behavior/Evolution) may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 323S. Sex Differences in Cognition and Perception.

Examination of facts, theories, and implications of sex differences in human cognition and perception. Subjects include genetic and hormonal origins of sex differences, structural differences in the body and brain, verbal abilities, spatial abilities, learning, memory, sensory-motor abilities, and the auditory, olfactory, visual, and other sensory systems. Three lecture hours a week for one semester. Psychology 323S and 341K (Topic: Sex Differences in Cognition and Perception) may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K. Mathematics 316, 362K. Mechanical Engineering 335. Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 323V. Seeing and Acting in a Virtual World.

Methods of experimentation and discovery for examining one's own perceptions and actions in ordinary life. Three lecture hours a week for one semester. Psychology 323V and 341K (Topic: Seeing/Acting in Virtual World) may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 325K. Advanced Statistics.

Advanced statistical theory and methods for analysis of behavioral sciences data; subjects include analysis of variance and covariance, regression, and nonparametric techniques. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each: for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 326K. Principles of Conditioning and Learning.

Laws of animal and human learning, and the underlying mechanisms. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Psychology.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Psychology. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

# PSY 332. Behavioral Neuroscience.

Neuroscientific study of behavioral functions: fundamental structure and function of the human nervous system, sensory systems and perception, motor systems and behavior, motivation and learning, brain disorders and maladaptive behavior. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 332C. Hormones and Behavior.

Neuroscientific study of hormones and behavior in animals and humans. Includes sexual behavior, sexual differentiation, parental behavior, aggressive behavior, feeding and drinking, stress, learning, and memory. Three lecture hours a week for one semester. Psychology 332C and 341K (Topic: Hormones and Behavior) may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics

and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 332D. Human Brain Imaging in Psychology.

Study of human brain imaging technologies such as fMRI and electrophysiology. Three lecture hours a week for one semester. Psychology 332D and 341K (Topic: Human Brain Imaging in Psychology) may not both be counted. Prerequisite: For psychology majors, upperdivision standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C. and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 332M. The Neuroscience of Motivation and Reward.

Examination of mechanisms of the brain that control behaviors such as incentive motivation, reward, aversion, and addiction. Three lecture hours a week for one semester. Psychology 332M and 341K (Topic: Neuroscience of Motivation and Reward) may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 333C. Controversial Issues in Development.

An exploration of questions in developmental psychology that are currently in dispute. Subjects may include stem cell research, treatment of juveniles in the legal system, physician-assisted suicide, and methods of sex education. Three lecture hours a week for one semester. Psychology 333C and 341K (Topic: Controversial Issues in Development) may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335. Psychology 317. Sociology 317L. Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics

and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 333D. Introduction to Developmental Psychology.

Same as Women's and Gender Studies 333D. Physical. social. and cognitive development in humans. Three lecture hours a week for one semester. Only one of the following may be counted: Psychology 304, 333D, Women's and Gender Studies 333D, 345 (Topic 6). Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302). 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 333E. Identity Formation.

An introduction to historical theories of and current research on identity, with particular focus on identity development in the domains of occupation, religion, politics and morality, gender, ethnicity, and adoption. Three lecture hours a week for one semester. Psychology 333E and 341K (Topic: Identity Formation) may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 333F. Fantasy and Reality.

Examination of how children and adults decide what is real and what is not. Subjects include the fantasy-reality distinction, magical thinking, and religious cognition. Three lecture hours a week for one semester. Psychology 333F and 341K (Topic: Fantasy and Reality) may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific

Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 333G. The Development of Attachment Relationship.

Study of the attachment relationship. Three lecture hours a week for one semester. Psychology 333G and 341K (Topic: Dev of Attachment Relationship) may not both be counted. Prerequisite: For psychology majors, upper-division standing, and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Civil Engineering 311S. Economics 329. Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Social Work 318, Sociology 317L, Statistics 309, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), or 328M (or Statistics and Scientific Computation 328M).

# PSY 333M. Infant Development.

Examination of genetic and environmental determinants of social, perceptual, and cognitive development in infants from theoretical and research perspectives. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301. Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 333N. Cognitive Development.

Overview of the development of thinking from infancy through childhood. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 333P. Child Language.

Examination of theory and research concerning the development of language in the child. Three lecture hours a week for one semester. Only one of the following may be counted: Linguistics 373 (Topic:

Language Acquisition), 373 (Topic 1), Psychology 333P. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303). 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 333R. Social Development in Children.

Same as Women's and Gender Studies 333R. Development of social behavior (for example, sex typing and aggression) and social relationships. Three lecture hours a week for one semester. Only one of the following may be counted: Psychology 333R, Women's and Gender Studies 333R, 345 (Topic 19). Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306). 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 333T. Adolescent Development.

Physical, cognitive, social, and personality development during adolescence. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S. Economics 329. Educational Psychology 371. Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 333W. Moral Development.

An introduction to theory and research on morality. Subjects include culture and morality, Freudian and social learning perspectives on moral development, Kohlberg's theory of morality, challenge to Kohlberg's theory, and cognitive, familial, and emotional influence on morality. Three lecture hours a week for one semester. Psychology 333W and 341K (Topic: Moral Development) may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 334D. Psychology of Human Mating.

Mate selection, sources of conflict, and mating over the life span, studied in the context of evolutionary psychology and sexual selection theory. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 334E. Evolutionary Psychology.

Fundamentals of evolutionary psychology, including issues of natural and sexual selection, adaptation, and domain-specific psychological mechanisms. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 337. Psychology of Language.

Consideration of approaches to the study of language, its development in children, and its functioning; important research from psychology and linguistics. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 338K. Psychology of Reading.

Theory and research on the reading process and its acquisition. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302). 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 339. Behavior Problems of Children.

Adjustment difficulties during childhood and adolescence; causation and treatment. Three lecture hours a week for one semester. Only one of the following may be counted: Human Development and Family Sciences 342, Psychology 339. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 340M. Industrial Psychology.

A general introduction to organizational behavior and issues in industrial/organizational psychology. Subjects include organizational structure, selection and placement, leadership, job satisfaction, training, and change. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing, and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Social Work 318, Sociology 317L, Statistics 309, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), or 328M (or Statistics and Scientific Computation 328M).

# PSY 341K. Selected Topics in Psychology.

Topics of contemporary interest that may vary from semester to semester. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing. Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

Topic 4: Health Psychology.

Topic 7: Epidemiology.

Topic 8: Learning and the Brain.

**Topic 12: Personality Assessment.** Theoretical and methodological issues involved in trying to understand and measure personality. **Topic 14: Robot Cognition.** 

**Topic 15: History of Modern Psychology.** A survey of the diverse roots of modern psychology, the competing schools that influenced psychology's development, and the perspectives that guide scholarship in present-day psychology. Psychology 341K (Topic 15) and 341K (Topic: History and Systems of Psychology) may not both be counted.

Topic 16: Psychology of Fundamentalism. Psychological research and theory on religious fundamentalism. Considers the nature of different forms of religious fundamentalism, and possible psychological mechanisms that motivate fundamentalism. Includes topics such as the development of fundamentalism, the movement from fundamentalism to terrorism, and fundamentalism and the family. Topic 17: Psychology and Religion. An exploration of the psychological processes involved in religion. Discusses seminal psychological theories of religion, such as the work of James, Freud, Jung, and Maslow. Discussion of empirical work includes topics such as the development of religion across the life span, religious experience, conversion, and the effects of religion on mental and physical health.

# Topic 18: Language and Thought.

**Topic 19: Psychology of Literature.** Delves into the relation between literature and psychological research. Addresses this relation in terms of character development, plot devices, and historical influences. Broadly explore why people are interested in reading literature that might be subjective or wholly fictional in nature. Explore the extent to which authors create characters that 'ring true' to what psychological science has learned about human nature and how this affects the reader's enjoyment of the literature. Psychology 341K (Topic: Psychology of Literature) and 341K (Topic 19) may not both be counted.

# PSY 343K. Substance Abuse.

Causes of substance abuse: the evolutionary perspective, sex differences, predisposition, biological and cognitive theories; emphasis

on food and alcohol. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302). 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 345. Individual Differences.

Study of person-to-person variation in intelligence, personality, and interests, with an emphasis on genetic and environmental determinants, developmental processes, and their relation to real-world outcomes. Three lecture hours a week for one semester. Psychology 341K (Topic: Individual Differences) and 345 may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 346K. Psychology of Sex.

Development of sex from genes to human behavior. Three lecture hours a week for one semester. Psychology 306 and 346K may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M. Civil Engineering 311S. Economics 329. Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 350. Motivation.

Theory and research on motivation; biological and social determinants. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 352. Abnormal Psychology.

Biological and social factors in the development and treatment of psychopathology. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317. Sociology 317L. Social Work 318. Statistics 309. Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 353K. Psychopharmacology.

The pharmacology and the neurochemical, neurophysiological, and psychological effects of psychoactive drugs, with regard to their use as therapeutic and behavioral research tools. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 355. Cognition.

Theoretical and critical analysis of the development, nature, and function of the thought process. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 355C. Development of Categories and Concepts.

Study of the historical and contemporary knowledge about the ways that people learn about concepts. Three lecture hours a week for one semester. Psychology 341K (Topic: Categories and Concepts) and 355C may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 355D. Animal Cognition.

An introduction to animal intelligence and the evolution of mind. Examines what is known about intelligence in other animals, how intelligence is revealed in social and problem-solving behavior, and the ways in which human intelligence is structured by its evolutionary past. Three lecture hours a week for one semester. Psychology 341K (Topic: Animal Cognition) and 355D may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 355M. The Cognitive Psychology of Music.

Cognitive foundations of music in terms of physics of sound, the psychophysics of musical experience, perceptual organization of musical scenes, the perception of time through rhythm, and the ways in which music reflects natural form. Three lecture hours a week for one semester. Psychology 341K (Topic: Cognitive Psychology of Music) and 355M may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 355N. Cognitive Neuroscience.

Exploration of the link between the brain, mind, and behavior and cognitive neuroscience techniques. Three lecture hours a week for one semester. Psychology 341K (Topic: Cognitive Neuroscience) and 355N may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306). 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 355R. Reasoning and Decision Making.

Survey of psychological research on how people reason and make decisions. Subjects include mental models, causality, analogy, heuristics, emotion, motivation, culture, and decision making. Three lecture hours a week for one semester. Psychology 341K (Topic: Reasoning and Decision Making) and 355R may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 357. Undergraduate Research.

Supervised research experience. Individual instruction. May not be counted toward a major in psychology. May be repeated for credit. Offered on the pass/fail basis only. Prerequisite: At least thirty semester hours of college coursework, Psychology 301 with a grade of at least C, and consent of instructor.

# PSY 458. Experimental Psychology.

Techniques of psychological research illustrated in a series of laboratory experiments. Two lecture hours and four laboratory hours a week for one semester. Prerequisite: Upper-division standing, Psychology 301 and 418 with a grade of at least C in each, and a University grade point average of at least 3.25.

# PSY 158H. Honors Research Tutorial.

Enrollment restricted to students in the Psychology Honors Program. Individual instruction. May be repeated for credit. Offered on the pass/ fail basis only. Prerequisite: Upper-division standing, Psychology 301 and 418 with a grade of at least C in each, and consent of the honors adviser.

# PSY 359. Selected Topics: Readings: Tutorial.

Supervised reading in selected topics of significance; area of intensive study is chosen by the student in consultation with the instructor. Individual instruction. May not be counted toward a major in psychology. May be repeated for credit. Offered on the pass/fail basis only. Prerequisite: Upper-division standing, Psychology 301 with a grade of at least C, and consent of instructor.

# PSY 359H. Honors Research I.

Three lecture hours a week for one semester. Prerequisite: Upperdivision standing, Psychology 301 and 418 with a grade of at least C in each, six semester hours of upper-division coursework in psychology, a grade point average of at least 3.50 in psychology courses taken at the University, a University grade point average of at least 3.25, and consent of the honors adviser.

# PSY 364. Introduction to Clinical Psychology.

Introduction to techniques of assessment and treatment of psychopathology. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 364M. Mental Illness and the Brain.

Introduction to the brain dysfunction and cognitive impairment often associated with mental illness and how its recognition and assessment can be used to help with differential diagnosis, prognosis, and treatment planning. Three lecture hours a week for one semester. Psychology 341K (Topic: Mental Illness and the Brain) and 364M may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 364P. Positive Psychology and the Good Life.

A survey of the emerging field of positive psychology, including assessment and determinants of well-being; human strengths and virtues; the good life considered from evolutionary, economic, sociological, and cross-cultural perspectives; and applications to issues such as social change. Three lecture hours a week for one semester. Psychology 341K (Topic: Positive Psychology and the Good Life) and 364P may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 364S. Human Sexuality.

Human sexuality from a clinical and evolutionary perspective with a focus on the assessment, diagnoses, and treatment of sexual dysfunctions. Three lecture hours a week for one semester. Psychology 341K (Topic: Human Sexuality) and 364S may not both be counted. Prerequisite: For psychology majors, upper-division standing, and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Social Work 318, Sociology 317L, Statistics 309, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), or 328M (or Statistics and Scientific Computation 328M).

# PSY 364T. Multicultural Psychotherapy.

Introduction to multicultural approaches to personality assessment and counseling psychotherapy. Three lecture hours a week for one semester. Psychology 341K (Topic: Multicultural Psychotherapy) and 364T may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 365E. Emotion.

Examination of the scientific literature on the psychology of human and animal emotion. Three lecture hours a week for one semester. Psychology 341K (Topic: Emotion) and 365E may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 365G. Gender and Racial Attitudes.

Advanced introduction to the psychological study of gender and racial attitudes in children and adults, with emphasis on the causes, consequences, and revision of an individual's gender and racial stereotypes. Three lecture hours a week for one semester. Psychology 341K (Topic: Gender and Racial Attitudes) and 365G may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 365L. Advanced Social Psychology.

Experimental research in social psychology, social influence, decision making, affiliation, risk taking, stress, and other subjects. Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 371. Learning and Memory.

Analysis of theory and research in learning. Three lecture hours a week for one semester. Psychology 341K (Topic: Brain Mechanisms of

Learning and Memory) and 371 may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303). 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 371R. Brain Mechanisms and Learning Theory Applied to Real World Scenarios.

Three lecture hours a week for one semester. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302). 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 373N. The Neurobiology of Attention.

Examination of behavioral and brain mechanisms of attention in humans and other animals. Three lecture hours a week for one semester. Psychology 341K (Topic: Neurobiology of Attention) and 373N may not both be counted. Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# PSY 377P, 677P. Undergraduate Practicum.

Field experience in applied psychology. Students are supervised by faculty members and by practitioners in community agencies. One lecture hour and ten or twenty hours of fieldwork a week for one semester. May not be counted toward a major in psychology. May be repeated for credit. Offered on the pass/fail basis only. Prerequisite: Upper-division standing and consent of the practicum supervisor.

# PSY 379H. Honors Research II.

Three lecture hours a week for one semester. Prerequisite: Upper-division standing, Psychology 301 and 418 with a grade of at least C in each, Psychology 458 and 359H, and consent of the honors adviser.

# **Department of Religious Studies**

# **Religious Studies: R S**

# **Lower-Division Courses**

# R S 302. History of the Religions of Asia.

Same as Asian Studies 301R. Eastern religions: an introduction to the basic forms and the historical development of the religious traditions of India, China, and Japan. Three lecture hours a week for one semester.

# R S 304. Judaism, Christianity, and Islam: An Introduction.

Same as History 304R, Islamic Studies 311 (Topic 2: Judaism, Christianity, and Islam: An Introduction), and Jewish Studies 311 (Topic 2: Judaism, Christianity, and Islam: An Introduction). Examines the intertwined historical development of the religions of Judaism, Christianity, and Islam, and explores the principal beliefs and practices of Jews, Christians, and Muslims. Three lecture hours a week for one semester.

# R S 305. Introduction to the Philosophy of Religion.

Same as Core Texts and Ideas 310 (Topic 3) and Philosophy 305. A critical examination of various conceptions of God and of the relationship of the human and the divine. Three lecture hours or two lecture hours and one laboratory/discussion hour a week for one semester. Only one of the following may be counted: Core Texts and Ideas 310 (Topic: Introduction to the Philosophy of Religion), 310 (Topic 3), Philosophy 305, Religious Studies 305.

# R S 306. Topics in Comparative Religion.

Three lecture hours a week for one semester. Additional hours are required for some topics. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: The Roots of Religious Toleration**. Same as European Studies 306 (Topic 3), History 317N (Topic 1), and Jewish Studies 311 (Topic 5). Examines how freedom of conscience and religion crystallized in western and central Europe, both as a pragmatic practice and as a matter of principle. Only one of the following may be counted: Core Texts and Ideas 310 (Topic: Roots of Religious Toleration), European Studies 306 (Topic: Roots of Religious Toleration), 306 (Topic 3), History 317N (Topic: Roots of Religious Toleration), 317N (Topic 1), Jewish Studies 311 (Topic: Roots of Religious Toleration), 311 (Topic 5), Religious Studies 306 (Topic: Roots of Religious Toleration), 306 (Topic 1).

**Topic 2: Literature and Religion.** Same as English 314J (Topic 2). Only one of the following may be counted: English 314J (Topic: Literature and Religion), 314J (Topic 2), Religious Studies 306 (Topic: Literature and Religion), 306 (Topic 2).

# R S 306C. Comparative Religious Ethics.

Three lecture hours a week for one semester. Religious Studies 306 (Topic: Comparative Religious Ethics) and 306C may not both be counted.

# R S 310. Introduction to the Study of Religion.

Introduction to scholarly methods in the study of religion. Three lecture hours a week for one semester. Only one of the following may be counted: Asian Studies 301M (Topic 5: Introduction to the Study of Religion), Religious Studies 310, Sociology 313K.

# R S 312. Topics in the Religions of Asia.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

# R S 312C. Introduction to Buddhism.

Same as Asian Studies 301M (Topic 11: Introduction to Buddhism). A structural and historical overview of Buddhism through the examination of various schools, doctrines, biographical narratives, and contemporary ethical issues. Three lecture hours a week for one semester. Only one of the following may be counted: Asian Studies 301M (Topic 11), Religious Studies 312 (Topic: Introduction to Buddhism), 312C.

# R S 313. Topics in Judaism.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

# R S 313C. Introduction to the Old Testament.

Same as Core Texts and Ideas 305G, Jewish Studies 311 (Topic 4), and Middle Eastern Studies 310 (Topic 3). Introduction to the many interpretations of the Hebrew Bible (the Old Testament) and its meaning in the context of its historical and cultural setting in the ancient Near East. Three lecture hours a week for one semester. Only one of the following may be counted: Core Texts and Ideas 305G, 310 (Topic: Introduction to the Hebrew Bible), Jewish Studies 311 (Topic: Introduction to the Hebrew Bible), 311 (Topic 4), Middle Eastern Studies 310 (Topic: Introduction to the Hebrew Bible), 310 (Topic 3), Religious Studies 313 (Topic: Introduction to the Hebrew Bible), 313C.

# R S 313M. Jewish Civilization: Beginnings to 1492.

Same as History 306N (Topic 10), Jewish Studies 304M, and Middle Eastern Studies 310 (Topic 6). Introduction to the history, culture, and religion of the Jewish people from around 1000 BC to the end of the medieval period. Subjects may include ancient Israel, late Second Temple sectarianism, the rise of Christianity, rabbinic Judaism, medieval Jewish philosophy, Jewish mysticism, and Hebrew poetry. Three lecture hours a week for one semester. Only one of the following may be counted: History 306N (Topic: Jewish Civilization I), 306N (Topic 10), Jewish Studies 304M, 311 (Topic: Jewish Civilization I), Middle Eastern Studies 310 (Topic: Jewish Civilization: Beginnings to 1492), 310 (Topic 6), Religious Studies 313 (Topic: Jewish Civilization I), 313M.

# R S 313N. Jewish Civilization: 1492 to the Present.

Same as European Studies 306 (Topic 4), History 306N (Topic 11), and Jewish Studies 304N. Subjects may include trends toward secularization, the emancipation of European Jewry, the emergence of American Jewry, the Holocaust, the establishment of the State of Israel, and the Arab-Israeli conflict. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 306 (Topic: Jewish Civilization: 1492 to the Present), 306 (Topic 4), History 306N (Topic 11), Jewish Studies 304N, 311 (Topic: Jewish Civilization: 1492 to the Present), Religious Studies 313 (Topic: Jewish Civilization: 1492 to the Present), 313N.

# R S 314. Topics in Islam.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

# R S 314K. Introduction to the Middle East: Religious, Cultural, and Historical Foundations.

Same as History 306K and Middle Eastern Studies 301K. A survey of the history and civilization of the Middle East from the sixth to the fourteenth century. Three lecture hours a week for one semester. Only one of the following may be counted: History 306K, Middle Eastern Studies 301K, Religious Studies 314 (Topic: Intro M East: Rel/Cul/Hist Fnd), 314K.

# R S 315. Topics in Christian History.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: The Bible and Its Interpreters.** Same as Core Texts and Ideas 304 (Topic 1). Seeks to develop a wide-ranging familiarity with the Jewish and Christian Bibles and with the dominant modes of ancient, medieval, and early modern biblical interpretation. Readings include an extensive range of primary sources, including both the Scriptures themselves and some of their most influential exegetes. Only one of the following may be counted: Core Texts and Ideas 304 (Topic 1), Religious Studies 315 (Topic 1).

# R S 315N. Introduction to the New Testament.

Examines representative examples of the texts found in the Christian New Testament and selected noncanonical writings. Focuses on historical setting and systematic methods of interpretation. Three lecture hours a week for one semester. Only one of the following may be counted: Classical Civilization 304C (Topic: Introduction to the New Testament), Religious Studies 315 (Topic: Introduction to the New Testament), 315N.

# R S 316K. Topics in Religions of the Americas.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 2: American Jews: The Yiddish Experience.** Same as American Studies 315 (Topic 6), German, Scandinavian, and Dutch Studies 310 (Topic 1), and Jewish Studies 311 (Topic 9). Focuses on over a century of Yiddish-based contributions to American literature, music, and film, including works by Isaac Bashevis Singer, Michael Chabon, Woody Allen, and the Marx Brothers. Only one of the following may be counted: American Studies 315 (Topic 6); German, Scandinavian, and Dutch Studies 310 (Topic 4), 315 (Topic 6); German, Scandinavian, and Dutch Studies 310 (Topic: Jews in America: The Yiddish Experience), 310 (Topic 1); Jewish Studies 311 (Topic: Jews in America: The Yiddish Experience), 313 (Topic 6), 311 (Topic 9); Religious Studies 313 (Topic: Jews in America: The Yiddish Experience), 313 (Topic 1), 316K (Topic 2).

# R S 316U. Topics in Religions of the United States.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: History of Religion in the United States.** Same as American Studies 315 (Topic 5) and History 317L (Topic 16). Explores instances of religious dominance and religious diversity in United States history. Moving from the pre-colonial period to the present, it examines the changing circumstances of several religious communities, including American Indians and Puritans, Protestant evangelicals, Mormons, Roman Catholics, Jews, Muslims, and Hindus. Only one of the following may be counted: American Studies 315 (Topic: History of Religion in the United States), 315 (Topic 5), History 317L (Topic: History of Religion in the United States), 317L (Topic 16), Religious Studies 316U (Topic: History of Religion in the United States), 316U (Topic 1).

# R S 317. Topics in the Religions of Africa.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

# R S 318. The Rise of Christianity.

Same as Classical Civilization 318. Introduction to the origins and development of Christianity. Three lecture hours a week for one semester.

# R S 319. Introduction to Islam.

Same as Asian Studies 301M (Topic 15), History 306N (Topic 7), and Islamic Studies 310. The beliefs, theology, history, and main social and legal institutions of Islam, including the concept of God and society, the role of women, and Islamic government and movements. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Asian Studies 301M (Topic 15), History 306N (Topic 7), Islamic Studies 310, Religious Studies 319.

# R S 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Religious Studies.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Religious Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

# **Upper-Division Courses**

# R S 321. History of Hindu Religious Traditions.

Same as Anthropology 324L (Topic 23: History of Hindu Religious Traditions), Asian Studies 340 (Topic 4: History of Hindu Religious Traditions), and History 364G (Topic 1: History of Hindu Religious Traditions). History of major doctrines, practices, and institutions that shaped the development of Hinduism; how religions adapt to social and cultural change and often provide the catalyst for change. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

# R S 322. History of Indian Buddhism.

Same as Asian Studies 340 (Topic 5: History of Indian Buddhism). The institutional, social, economic, and doctrinal history of Buddhism in India. Three lecture hours a week for one semester. Prerequisite: Upper-division standing or consent of instructor.

# R S 325. Prophet of Islam: His Life and Times.

Same as History 364G (Topic 2) and Islamic Studies 340 (Topic 1). A detailed study of the prophet Muhammad's life and message, and of the means by which his life was recorded and popularized. Only one of the following may be counted: History 364G (Topic 2), Islamic Studies 340 (Topic 1), Religious Studies 325. Prerequisite: Upper-division standing.

# R S 325G. The Qur'an.

Same as Comparative Literature 323 (Topic 37), Core Texts and Ideas 375 (Topic 1), Islamic Studies 340 (Topic 2), Middle Eastern Languages and Cultures 321 (Topic 9), Middle Eastern Studies 342 (Topic 16), and Women's and Gender Studies 340 (Topic 54). The history, language, style, and themes of the Qur'an. Only one of the following may be counted: Comparative Literature 323 (Topic: The Qur'an), 323 (Topic 37), Core Texts and Ideas 375 (Topic: The Qur'an), Core Texts and Ideas 375 (Topic 1), Islamic Studies 340 (Topic 2), Middle Eastern Languages and Cultures 321 (Topic 9), Middle Eastern Studies 342 (Topic 16), Religious Studies 325G, Women's and Gender Studies 340 (Topic: The Qur'an), 340 (Topic 54). Prerequisite: Upper-division standing.

# R S 326. History of Religion in America since 1800.

Same as History 351P. Introduction to the history of religion in the United States of America from the nineteenth century to the present. Focuses

on how diverse peoples imagined and transformed the landscape, interacted with one another at different sites, and moved within and across national borders. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

# R S 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Religious Studies.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Religious Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated program. May be repeated for credit when the topics vary.

# R S 335. Jesus in History and Tradition.

Same as Classical Civilization 348 (Topic 10: Jesus in History and Tradition). Critical issues, scholarly debates, and historical methods in studying the development of the Christian tradition regarding the figure of Jesus. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

# R S 341. Topics in Religions of South Asia.

Three lecture hours or two lecture hours and one laboratory/discussion hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Indian Philosophies.** Same as Asian Studies 372 (Topic 2: Indian Philosophies) and Philosophy 348 (Topic 2: Indian Philosophies).

**Topic 2: Diversity of Indian Traditions.** Same as Asian Studies 372 (Topic 19: Diversity of Indian Traditions). Art and architecture of South Asia from 1200 to 1900 CE, within the context of Indian culture. Three lecture hours a week for one semester. Prerequisite: For art history and visual art studies majors, Art History 302 and 303; for others, at least one of the following is advisable but not required: Art History 301, 302, 303.

Topic 3: Gender, Sexuality, and the Family in Indian Religions and Cultures. Same as Anthropology 324L (Topic 40: Gender, Sexuality, and the Family in Indian Religions and Cultures), Asian Studies 372 (Topic 25: Gender, Sexuality, and the Family in Indian Religions and Cultures), and Women's and Gender Studies 340 (Topic 25: Gender, Sexuality, and the Family in Indian Religions and Cultures). A comprehensive historical overview of gender issues as they are represented in the textual traditions of South Asia.

**Topic 5: Gandhi and Gandhism.** Same as Asian Studies 361 (Topic 6: Gandhi and Gandhism) and History 350L (Topic 5: Gandhi and Gandhism).

**Topic 8: Buddhist Art.** Same as Art History 348N and Asian Studies 372 (Topic 24). Explores the development of Buddhist art in South Asia, the land of its origin as well as its spread elsewhere. Focus on the question of "what is" Buddhist art. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 348N, 372 (Topic: Buddhist Art), Asian Studies 372 (Topic 24), Religious Studies 341 (Topic 8).

**Topic 9: The Taj Mahal and the Diversity of Indian Art.** Same as Art History 348M. Examination of the period when Islamic dynasties controlled much of the subcontinent and how a unique mix of forms and cultural practices shaped the development of monuments such as the Taj Mahal. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 348M, 372 (Topic: The Taj Mahal and the Diversity of Indian Art), Asian Studies 372 (Topic: The Taj Mahal and the Diversity of Indian Art), Religious Studies 341 (Topic 9). Additional prerequisite: Upper-division standing. **Topic 11: Indian Poetry and Religions.** Same as Asian Studies 379 (Topic 4). Explores the intersections of religion and poetry in the history of Indian literature as expressed in multiple settings and variations including hymns, chants, bhajans, poetic narratives, and new poetic conventions that deal with caste and gender identities. Only one of the following may be counted: Asian Studies 340 (Topic: Indian Poetry and Religions), 379 (Topic 4), Religious Studies 341 (Topic: Indian Poetry and Religions), 341 (Topic 11).

**Topic 12: South Asian Saints and Yogis.** Same as Asian Studies 379 (Topic 2). Life stories, teachings, and cultic practices of various holy figures and sainthood practices in South Asia, with an emphasis on the intersection between classical and modern history, religion, literature, and philosophy in relation to these practices and the making of modern South Asia. Only one of the following may be counted: Anthropology 324L (Topic: South Asian Saints and Yogis), Asian Studies 340 (Topic: South Asian Saints and Yogis), 379 (Topic 2), Religious Studies 341 (Topic: South Asian Saints and Yogis), 341 (Topic 12).

Topic 13: Devotion in South India. Same as Asian Studies 372 (Topic 31). Examines aspects of devotion in everyday life and how religions, such as Islam, Buddhism, and Christianity, are translated into a predominantly Hindu South India. Only one of the following may be counted: Asian Studies 372 (Topic: Devotion in South India), 372 (Topic 31), Comparative Literature 323 (Topic: Devotion in South India), Religious Studies 341 (Topic: Devotion in South India), 341 (Topic 13). Additional prerequisite: Upper-division standing. Topic 14: Living Epics of India. Same as Asian Studies 372 (Topic 38) and Comparative Literature 323 (Topic 26). Exploration of Indian epics in the Sanskritic textual heritage, performative arts, and regional language versions, and their impact in the formation of the values of the people of India. Only one of the following may be counted: Asian Studies 372 (Topic: Living Epics of India), 372 (Topic 38), Comparative Literature 323 (Topic: Living Epics of India), 323 (Topic 26), Theatre and Dance 357T (Topic: Living Epics of India), Religious Studies 341 (Topic: Living Epics of India), 341 (Topic 14).

**Topic 16: Nonconformist Thinkers of India.** Same as Asian Studies 372 (Topic 44). Introduction to Indian philosophy focusing on dissenting voices and the opponents of the mainstream to examine the subversive challenge of their thoughts. Only one of the following may be counted: Asian Studies 372 (Topic: India's Nonconformist Thinkers), 372 (Topic 44), Philosophy 348 (Topic: India's Nonconformist Thinkers), Religious Studies 341 (Topic: India's Nonconformist Thinkers), 341 (Topic 16). Additional prerequisite: Upper-division standing.

# R S 341G. Yoga as Philosophy and Practice.

Same as Philosophy 356 (Topic 2). Three lecture hours a week for one semester. Only one of the following may be counted: Asian Studies 372 (Topic: Yoga as Philosophy and Practice), Philosophy 356 (Topic: Yoga as Philosophy and Practice), 356 (Topic 2), Religious Studies 341G. Prerequisite: Upper-division standing.

# R S 342. Topics in Religions of Central Asia.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

# R S 344. The Age of Reformation.

Same as History 343. Examines late medieval religion, the rise of Protestant movements, and the Catholic response in their cultural, political, and social contexts. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

# R S 345. Islamic Spain and North Africa to 1492.

Same as History 375D and Middle Eastern Studies 343 (Topic 4). An introduction to the impact of Islam on Spain and North Africa, with

emphasis on social, economic, and cultural development. Only one of the following may be counted: Ancient History and Classical Civilization 330 (Topic: Islamic Spain and North Africa to 1492), History 375D, Islamic Studies 373 (Topic: Islamic Spain and North Africa to 1492), Middle Eastern Studies 343 (Topic 4), Religious Studies 345, 363 (Topic: Islamic Spain and North Africa to 1492). Prerequisite: Upper-division standing.

# R S 346. Topics in the Religions of the United States.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 2: Religion in American Political Thought**. Same as Government 335M (Topic 5: Religion in American Political Thought). Prerequisite: Upper-division standing and six semester hours of lower-division coursework in government.

**Topic 5: United States Catholic History.** Same as American Studies 327 (Topic 4), History 365G (Topic 1), and Mexican American Studies 374 (Topic 37). Examines how Catholicism and national identity work for Catholics in the United States, with an emphasis on Catholic women and Latinos/as. Only one of the following may be counted: American Studies 321 (Topic: United States Catholic History), 327 (Topic 4), History 365G (Topic: United States Catholic History), 365G (Topic 1), Mexican American Studies 374 (Topic: United States Catholic History), 374 (Topic 37), Religious Studies 346 (Topic: United States Catholic History), 346 (Topic 5).

**Topic 6: Evangelical Christianity.** Same as American Studies 327 (Topic 5). An introduction to the intellectual and social sources of evangelical Protestant traditions in the United States, their varieties of belief and practice, and their role in the wider Christian community and American society. Only one of the following may be counted: American Studies 327 (Topic: Evangelical Christianity), 327 (Topic 5), Religious Studies 346 (Topic: Evangelical Christianity), 346 (Topic 6). Prerequisite: Upper-division standing.

**Topic 7: The Black Church in African American Politics.** Same as African and African Diaspora Studies 374D (Topic 14) and Government 370K (Topic 4). Examination of the political role of the black church and its leaders in the development of African American political behavior. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: Black Church in African American Politics), 374D (Topic 14), Government 370K (Topic 4), Religious Studies 346 (Topic: Black Church in African American Politics), 346 (Topic 7).

**Topic 8: Representation of Jews in the American Public Sphere**. Same as Anthropology 325L (Topic 13) and Jewish Studies 365 (Topic 11). Examines how Jews have been represented and constituted in American public culture as a race, religion, and/or nation through distinct institutions and display practices. Only one of the following may be counted: Anthropology 325L (Topic: Representation of Jews in the American Public Sphere), 325L (Topic 13), Jewish Studies 365 (Topic: Representation of Jews in the American Public Sphere), 325L (Topic: Representation of Jews in the American Public Sphere), 365 (Topic 11), Religious Studies 346 (Topic: Representation of Jews in the American Public Sphere), 346 (Topic 8).

**Topic 9: American Jewish Material Culture.** Same as Anthropology 325L (Topic 17) and Jewish Studies 365 (Topic 12). Examines the interplay between material culture and Jewish identity and thought in contemporary America. Only one of the following may be counted: Anthropology 325L (Topic: American Jewish Material Culture), 325L (Topic 17), Jewish Studies 365 (Topic: American Jewish Material Culture), 365 (Topic 12), Religious Studies 346 (Topic: American Jewish Material Culture), 346 (Topic 9).

**Topic 10: The History of Islam in the United States.** Same as History 350R (Topic 22) and Islamic Studies 372 (Topic 21). A brief introduction to Islam. Defines the role of Islam and views of Muslims in the early history of the United States, and introduces students to major issues concerning contemporary American Muslims. Only one of the following may be counted: History 350R (Topic: History of Islam in the United States), 350R (Topic 22), Islamic Studies 372 (Topic: History of Islam in the United States), 372 (Topic 21), Religious Studies 346 (Topic: History of Islam in the United States), 346 (Topic 10).

Topic 11: Debating the Bible in the Twenty-First Century. Examines the ways in which individuals, primarily in the United States, have regarded the Bible as relevant or irrelevant to contemporary life. Discussion of contemporary controversial issues in which the Bible has played a role and how these relate to earlier controversies, such as the position of the Bible on slavery. Introductory courses in the Hebrew Bible and/or New Testament recommended. Only one of the following may be counted: American Studies 327 (Topic: Debating the Bible in 21st Century), Core Texts and Ideas 375 (Topic: Debating the Bible in 21st Century), Religious Studies 346 (Topic: Debating the Bible in 21st Century), 346 (Topic 11). Additional prerequisite: Upperdivision standing.

# R S 346C. Religion and Visual Culture in the United States.

Focuses on artifacts or "visual culture," and considers how religion mediates artifacts and how artifacts mediate religion. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: American Studies 325 (Topic: Religion and Visual Culture in the United States), Religious Studies 346 (Topic: Religion and Visual Culture in the United States), 346C.

#### R S 346D. Native American Religions.

Examination of religious developments in Native American communities from the precolonial period through the present day. Focus on the changing forms of ritual practice and the relationship between religion and community life. Only one of the following may be counted: American Studies 327 (Topic: Native American Religion), Religious Studies 346 (Topic: Native American Religion), 346D. Prerequisite: Upper-division standing.

# R S 346E. Religion and Film.

Survey of representations of religious beliefs, practices, persons, and institutions in popular film. Examination of film as a vehicle to reflect how a shared religious imagination shaped the way Americans understand themselves. Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 321 (Topic: Religion and Film), Religious Studies 346 (Topic: Religion and Film), 346E. Prerequisite: Upper-division standing.

# R S 346G. Religion in the American West.

Same as American Studies 327 (Topic 8). Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 327 (Topic: Religion in the American West), 327 (Topic 8), Religious Studies 346 (Topic: Religion in the American West), 346G. Prerequisite: Upper-division standing.

# R S 352. Topics in Religions of East Asia.

Three lecture hours or two lecture hours and one laboratory/discussion hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 3: Religion and Rebellion in Modern East Asia.** Same as Asian Studies 340 (Topic 6). Examines how nineteenth- and twentieth-century new religious movements in Japan, China, Korea, and Tibet have expressed dissatisfaction with society and/or the state through rebellious and sometimes violent activity. Only one of the following may be counted: Asian Studies 340 (Topic 6), History 364G (Topic: Religion/Rebellion in Modern East Asia), Religious Studies 352 (Topic 3).

**Topic 4: Ritual and Religion in Korea.** Same as Asian Studies 340 (Topic 10: Ritual and Religion in Korea). Examination of major religious traditions of Korea; focus on the recent history and contemporary practice, and the relation between religion and politics during Korea's colonial (1910-1945) and postcolonial eras. Three lecture hours a week for one semester. Only one of the following may be counted: Anthropology 324L (Topic: Ritual and Religion in Korea), Asian Studies 340 (Topic 10), Religious Studies 352 (Topic 4). Additional prerequisite: Upper-division standing.

**Topic 7: Religion in Japanese History.** Same as Asian Studies 340 (Topic 9: Religion in Japanese History). Examines religious concepts and practices in wider contexts of modern Japanese culture and society. Focuses on the critical understanding of the individual and collective aspects of Japanese spiritual life. Three lecture hours a week for one semester.

**Topic 8: Japanese Concepts of Body and Self.** Same as Anthropology 324L (Topic 69) and Asian Studies 372 (Topic 41). Exploration of anthropological literature describing Japanese conceptions of self and body, and analysis of the intersection of these conceptions of self with Japanese ideas about religion, morality, aging, and medicine. Only one of the following may be counted: Anthropology 324L (Topic: Japanese Concepts of Body and Self), 324L (Topic 69), Asian Studies 372 (Topic: Japanese Concepts of Body and Self), 372 (Topic 41), Religious Studies 352 (Topic: Japanese Concepts of Body and Self), 352 (Topic 8).

**Topic 9: Religion and Family in Japanese Society.** Same as Asian Studies 361 (Topic 38). Explores the structures of family, kinship, and religion in Japan since 1868 and their roles in the creation and expression of national and individual identities. Only one of the following may be counted: Anthropology 324L (Topic: Religion and Family in Japanese Society), Asian Studies 361 (Topic 38), 372 (Topic: Religion and Family in Japanese Society), Religious Studies 352 (Topic: Religion and Family in Japanese Society), 352 (Topic 9). **Topic 10: Confucianism.** Same as Asian Studies 372 (Topic 32). Philosophical and historical context of Confuciansim from its origins in ancient China through the early empire and beyond. Only one of the following may be counted: Asian Studies 372 (Topic: World of Confucians), 372 (Topic 32), Core Text and Ideas 375 (Topic: World of Confucians), Religious Studies 352 (Topic: World of Confucians), 352 (Topic 10).

**Topic 11: Self-Cultivation in Traditional China.** Same as Asian Studies 372 (Topic 33). Ideas and practices of self-cultivation as represented in diverse philosophical, religious, and occult traditions in premodern China. Only one of the following may be counted: Asian Studies 372 (Topic: Self-Cultivation in Traditional China), 372 (Topic 33), Core Texts and Ideas 375 (Topic: Self-Cultivation in Traditional China), Religious Studies 352 (Topic: Self-Cultivation in Traditional China), 352 (Topic 11).

#### R S 353. Topics in Religion and Culture of the Biblical World.

Three lecture hours a week for one semester; additional hours may be required by some topics. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Revelation and Apocalyptic Literature**. Examines the Book of Revelation in the context of early Christian and Jewish literature. Study of other apocalyptic texts, methods of textual analysis, and the ongoing effects of Revelation in modern American culture. Only one of the following may be counted: Classical Civilization 348 (Topic: Revelation and Apocalyptic Literature), Religious Studies 353 (Topic: Revelation and Apocalyptic Literature), 353 (Topic 1). Additional prerequisite: Upper-division standing.

**Topic 2: Paul and His Social World.** Examines the life and letters of the first-century Jewish missionary Paul by interpreting his own writings within the context of diaspora Judaism and the broader Greco-

Roman world. Also explores his legacy within the context of early church history. Only one of the following may be counted: Classical Civilization 348 (Topic: Paul and His Social World), Jewish Studies 364 (Topic: Paul and His Social World), Religious Studies 353 (Topic: Paul and His Social World), 353 (Topic 2). Additional prerequisite: Upperdivision standing.

**Topic 3: The Sacred and the Secular in Contemporary Jewish Literature.** Same as Jewish Studies 363 (Topic 10), Middle Eastern Languages and Cultures 321 (Topic 8), and Middle Eastern Studies 342 (Topic 8). Only one of the following may be counted: Comparative Literature 323 (Topic: The Sacred and the Secular in Contemporary Jewish Literature), English 322 (Topic: The Sacred and the Secular in Contemporary Jewish Literature), Jewish Studies 363 (Topic 10), Middle Eastern Languages and Cultures 321 (Topic 8), Middle Eastern Studies 342 (Topic 8), Religious Studies 353 (Topic: The Sacred and the Secular in Contemporary Jewish Literature), 353 (Topic 3). Additional prerequisite: Upper-division standing.

# R S 353D. The Dead Sea Scrolls.

Same as Ancient History and Classical Civilization 330 (Topic 1), History 364G (Topic 3), Jewish Studies 364 (Topic 4), Middle Eastern Languages and Cultures 321 (Topic 17), and Middle Eastern Studies 342 (Topic 23). Three lecture hours a week for one semester. Only one of the following may be counted: Ancient History and Classical Civilization 330 (Topic: The Dead Sea Scrolls), 330 (Topic 1), History 364G (Topic 3), Jewish Studies 364 (Topic 4), Middle Eastern Languages and Cultures 321 (Topic 17), 342 (Topic 23), Religious Studies 353D. Prerequisite: Upper-division standing.

# R S 353E. Beyond the New Testament.

Study of early Christian writings that were not included in the Christian Bible. Examines issues such as the effect of narrative, religion and violence, gendered expectations for women and men, the uses of fantasy literature, and religious authority. Emphasis on systematic methods for disciplined interpretation. Only one of the following may be counted: Classical Civilization 348 (Topic: Beyond the New Testament), Religious Studies 353 (Topic: Beyond the New Testament), 353E. Prerequisite: Upper-division standing.

# R S 354D. The Bible and History.

Same as Jewish Studies 364 (Topic 3). The critical uses of biblical and extrabiblical data in the reconstruction of the history of the biblical period. Three lecture hours a week for one semester. Only one of the following may be counted: Ancient History and Classical Civilization 330 (Topic: The Bible and History), Jewish Studies 364 (Topic 3), Religious Studies 354D. Prerequisite: Upper-division standing.

# R S 355. The Bible as Literature.

Same as English 358J. In-depth literary study of the Bible, with emphasis on the formal features of narrative, hymn, prophecy, apocalypse, gospel, and epistle. Three lecture hours a week for one semester. English 358J and Religious Studies 355 may not both be counted. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

# R S 355K. The Bible in British and American Literature.

Same as English 358K. The reading of biblical masterpieces as literature; consideration of different versions of the Bible and their influence on British and American literature. Three lecture hours a week for one semester. English 358K and Religious Studies 355K may not both be counted. Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

# R S 357. Topics in the Religions of Europe.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 1: Heresy and the Inquisition. Same as History 350L (Topic 33: Heresy and the Inquisition). Prerequisite: Upper-division standing. Topic 2: Byzantine Art. Same as Art History 329J. Examination of the medieval art and architecture of the eastern Roman empire, including related traditions (Coptic, Armenian, Georgian, Crusader, Norman). Three lecture hours a week for one semester. Art History 329J and Religious Studies 357 (Topic 2) may not both be counted. Topic 5: Geography of Religion in Eastern Europe and Russia. Same as Geography 356T (Topic 14) and Russian, East European, and Eurasian Studies 345 (Topic 9). A comprehensive overview of major religious culture regions in the former Eastern bloc countries. Only one of the following may be counted: Geography 356T (Topic: Geography of Religion in Eastern Europe and Russia), 356T (Topic 14); Religious Studies 357 (Topic: Geography of Religion in Eastern Europe and Russia), 357 (Topic 5); Russian, East European, and Eurasian Studies 345 (Topic: Geography of Religion in Eastern Europe and Russia), 345 (Topic 9). Additional prerequisite: Upper-division standing. Topic 6: Northern Renaissance Art, 1500-1600. Same as Art History 332L and European Studies 347 (Topic 32). Art and cultural development in the sixteenth century; artists include Duerer, Gruenewald, Holbein, and Brueghel. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 332L, European Studies 347 (Topic: Northern Renaissance Art, 1500-1600), 347 (Topic 32), Religious Studies 357 (Topic: Northern Renaissance Art, 1500-1600), 357 (Topic 6).

Topic 7: Northern Renaissance Art, 1350-1500. Same as Art History 332K and European Studies 347 (Topic 27). Northern European art from the International Style to van Eyck and Hieronymus Bosch. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 332K, European Studies 347 (Topic: Northern Renaissance Art, 1350-1500), 347 (Topic 27), Religious Studies 357 (Topic: Northern Renaissance Art, 1350-1500), 357 (Topic 7). Topic 8: Spinoza and Modernity. Same as Core Texts and Ideas 321F, European Studies 346 (Topic 21), History 362P, Jewish Studies 364 (Topic 9), and Philosophy 354 (Topic 7). Introduction to the core of Spinoza's writings and the diverse reactions they have elicited. Examines Spinoza's refusal of mind-body dualism, as well as a transcendent god or ideal as a way of understanding Spinoza's concepts and ideas. Three lecture hours a week for one semester. Only one of the following may be counted: Core Texts and Ideas 335 (Topic: Spinoza and Modernity), 321F, European Studies 346 (Topic: Spinoza and Modernity), 346 (Topic 21), 347 (Topic: Spinoza and Modernity), History 362G (Topic: Spinoza and Modernity), 362P, Jewish Studies 364 (Topic: Spinoza and Modernity), 364 (Topic 9), Philosophy 334K (Topic: Spinoza and Modernity), 354 (Topic: Spinoza and Modernity), 354 (Topic 7), Religious Studies 357 (Topic: Spinoza and Modernity), 357 (Topic 8). Additional prerequisite: Upper-division standing.

**Topic 9: The Church and the Jews.** Same as European Studies 346 (Topic 28), History 362G (Topic 14), and Jewish Studies 364 (Topic 10). Examination of the complex relationship between the Western Church and Jews over two millenia. Only one of the following may be counted: European Studies 346 (Topic: The Church and the Jews), 346 (Topic 28), History 362G (Topic: The Church and the Jews), 362G (Topic 14), Jewish Studies 364 (Topic: The Church and the Jews), 364 (Topic 10), Religious Studies 357 (Topic: The Church and the Jews), 357 (Topic 9). Additional prerequisite: Upper-division standing. **Topic 10: The Spanish Inquisition.** Same as European Studies 364 (Topic 5). Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic 5).

Spanish Inquisition), 346 (Topic 11), History 350L (Topic: The Spanish Inquisition), 350L (Topic 77), Jewish Studies 364 (Topic: The Spanish Inquisition), 364 (Topic 5), Religious Studies 357 (Topic: The Spanish Inquisition), 357 (Topic 10).

**Topic 11: The Age of Rembrandt and Rubens: Northern Baroque Art.** Same as Art History 333L and European Studies 347 (Topic 31). Northern European art in the seventeenth century, stressing the Netherlands and Flanders. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 333L, European Studies 347 (Topic: The Age of Rembrandt and Rubens: Northern Baroque Art), 347 (Topic 31), Religious Studies 357 (Topic: The Age of Rembrandt and Rubens: Northern Baroque Art), 357 (Topic 11).

**Topic 12: Heretics and Freedom Fighters, 1350-1650**. Same as European Studies 346 (Topic 8), German, Scandinavian, and Dutch Studies 360 (Topic 3), and History 362G (Topic 12). Explores the theologies, politics, and personal identities that emerged and passed away in this era. Only one of the following may be counted: Czech 324 (Topic: Heretics and Freedom Fighters, 1350-1650), 324 (Topic 4), European Studies 346 (Topic: Heretics and Freedom Fighters, 1350-1650), 346 (Topic 8), Germanic Civilization 327E (Topic: Heretics and Freedom Fighters, 1350-1650), German, Scandinavian, and Dutch Studies 360 (Topic 3), History 362G (Topic: Heretics and Freedom Fighters, 1350-1650), 362G (Topic 12), Religious Studies 357 (Topic: Heretics and Freedom Fighters, 1350-1650), 357 (Topic 12), Russian, East European, and Eurasian Studies 325 (Topic: Heretics and Freedom Fighters, 1350-1650), 325 (Topic 28).

**Topic 13: Jews of Eastern Europe.** Same as History 362G (Topic 8), Jewish Studies 364 (Topic 7), and Russian, East European, and Eurasian Studies 335 (Topic 23). Explores the history and culture of Jews in Eastern Europe. Only one of the following may be counted: History 362G (Topic: Jews of Eastern Europe), 362G (Topic 8), Jewish Studies 364 (Topic: Jews of Eastern Europe), 364 (Topic 7), Religious Studies 357 (Topic: Jews of Eastern Europe), 357 (Topic 13), Russian, East European, and Eurasian Studies 335 (Topic: Jews of Eastern Europe), 357 (Topic 23).

**Topic 14: Gothic Cathedral: Amiens.** Same as Art History 330J and European Studies 347 (Topic 30). An examination of the cathedral at Amiens, its meaning, structure, political and financial contexts, and sculptural programs, as well as its influence on other buildings in France and Germany. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 330J, 374 (Topic: Gothic Cathedral: Amiens), European Studies 347 (Topic: Gothic Cathedral: Amiens), 347 (Topic 30), Religious Studies 357 (Topic: Gothic Cathedral: Amiens), 357 (Topic 14).

Topic 15: Medieval Women Mystics. Same as European Studies 347 (Topic 18), German, Scandinavian, and Dutch Studies 361D, and Women's and Gender Studies 340 (Topic 51). The life and writings of Saint Birgitta of Sweden, fourteenth-century visionary, religious reformer, and pilgrim, examined and compared with her predecessor Hildegard of Bingen (Germany), her successor Margery Kempe (England), as well as Margery's mentor, Julian of Norwich. Social and historical contexts for all four of these women mystics will be explored in depth. Only one of the following may be counted: English 322 (Topic: Birgitta, Hildegard, and Margery), European Studies 347 (Topic: Birgitta, Hildegard, and Margery), 347 (Topic 18), German, Scandinavian, and Dutch Studies 361D, Germanic Civilization 327E (Topic 10: Birgitta, Hildegard, and Margery), Religious Studies 357 (Topic: Birgitta, Hildegard, and Margery), 357 (Topic 15), Scandinavian 373 (Topic 8: Birgitta, Hildegard, and Margery), Women's and Gender Studies 340 (Topic: Birgitta, Hildegard, and Margery), 340 (Topic 51). Additional prerequisite: Upper-division standing.

Topic 16: Northern Gods, Northern Faiths: The Conversion of Scandinavians, Finns, Northern Slavs and Shamans. Same as German, Scandinavian, and Dutch Studies 361G and Russian, East European, and Eurasian Studies 345 (Topic 7). An introduction to the basic source texts for several pre-Christian belief systems evolving in geographic proximity and their influence on one another including pre-Christian Slavic; pre-Christian Scandinavian; pre-Christian Sami and Finnish; and ancient and modern Siberian shamanism, Only one of the following may be counted: German, Scandinavian, and Dutch Studies 361G, Religious Studies 357 (Topic 16), Russian, East European, and Eurasian Studies 345 (Topic 7). Additional prerequisite: Upper-division standing.

**Topic 17: Introduction to Germanic Religion and Myth.** Same as European Studies 347 (Topic 3) and German, Scandinavian, and Dutch Studies 361C. Survey of the sources and main features of Germanic religion and of the transition from paganism to Christianity in northern Europe and the Germanic territories of western Europe. Subjects include cosmogonic myths; the origin of man and of society; the concept of the soul; gods and goddesses and their mythology; and the organization of worship. Three lecture hours a week for one semester. Only one of the following may be counted: English 322 (Topic 2), European Studies 347 (Topic 3), German, Scandinavian, and Dutch Studies 361C, Germanic Civilization 340E (Topic 1), Religious Studies 365 (Topic 2), Religious Studies 357 (Topic 17). Additional prerequisite: Upper-division standing.

**Topic 18: Holocaust Aftereffects.** Same as Comparative Literature 323 (Topic 40), European Studies 346 (Topic 23), German, Scandinavian, and Dutch Studies 360 (Topic 1), Jewish Studies 365 (Topic 14), and Women's and Gender Studies 340 (Topic 66). Explores the historical, political, psychological, theological, and cultural fallout of the Holocaust, as well as literary and cinematic responses in Europe and the United States. Only one of the following may be counted: Comparative Literature 323 (Topic: Holocaust Aftereffects), 323 (Topic 40), European Studies 346 (Topic: Holocaust Aftereffects), 346 (Topic 23), German, Scandinavian, and Dutch Studies 360 (Topic 1), Germanic Civilization 323E (Topic: Holocaust Aftereffects), Jewish Studies 365 (Topic: Holocaust Aftereffects), 365 (Topic: 14), Liberal Arts Honors 350 (Topic: Holocaust Aftereffects), 357 (Topic 18), Women's and Gender Studies 340 (Topic: Holocaust Aftereffects), 340 (Topic 66).

**Topic 20: The Sacred and the Secular in Modern European Thought.** Same as Core Texts and Ideas 335 (Topic 7), European Studies 346 (Topic 32), and History 362G (Topic 19). Introduces key themes and methodologies of intellectual history and social theory by exploring the dueling approaches to secularization and sacralization in modern European thought. Only one of the following may be counted: Core Texts and Ideas 335 (Topic 7), European Studies 346 (Topic: Sacred and Secular in Modern European Thought), 335 (Topic 7), European Studies 346 (Topic: Sacred and Secular in Modern European Thought), 346 (Topic 32), History 362G (Topic: Sacred and Secular in Modern European Thought), 362G (Topic 19), Religious Studies 357 (Topic 20). Additional prerequisite: Upper-division standing.

# R S 358. Topics in the Religions of the Middle East.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 2: Medieval Islam: Faith and History.** Same as History 350L (Topic 34) and Middle Eastern Studies 343 (Topic 5). Only one of the following may be counted: History 350L (Topic 34), Middle Eastern Studies 343 (Topic 5), Religious Studies 358 (Topic 2). Additional prerequisite: Upper-division standing.

**Topic 4: Sufism and Islamic Mysticism.** Same as Asian Studies 340 (Topic 8), Islamic Studies 340 (Topic 4), and Middle Eastern Studies 342 (Topic 24). Muslim debates of Sufism; the historical development of Sufi beliefs regarding theology, religious laws, expression, and popular social practices. Only one of the following may be counted:

Asian Studies 340 (Topic: Sufism and Islamic Mysticism), Asian Studies 340 (Topic 8), History 364G (Topic: Sufism and Islamic Mysticism), Islamic Studies 340 (Topic 4), Middle Eastern Studies 320 (Topic 16: Sufism: Islamic Mysticism and Spirituality), 342 (Topic 24), Religious Studies 341 (Topic: Sufism and Islamic Mysticism), 358 (Topic 4). Additional prerequisite: Upper-division standing. **Topic 5: Veiling in the Muslim World**. Same as Asian Studies 372 (Topic 14), Islamic Studies 372 (Topic 2), Middle Eastern Languages and Cultures 321 (Topic 22), and Women's and Gender Studies 340 (Topic 11). Only one of the following may be counted: Asian Studies 372 (Topic 14), Islamic Studies 372 (Topic 2), Middle Eastern Languages and Cultures 321 (Topic 22), Religious Studies 358 (Topic 5), Women's and Gender Studies 340 (Topic 11).

Topic 8: Gender Politics in the Islamic World. Same as Islamic Studies 373 (Topic 11), Middle Eastern Studies 341 (Topic 7), Sociology 336G, and Women's and Gender Studies 340 (Topic 44). Study of the Islamic world and major sociological concepts such as gender, social organizations, culture, and politics. Examines how culture is mediated by politics, resulting in diverse interpretations of Islam and in different policies with respect to women's rights. Three lecture hours a week for one semester. Only one of the following may be counted: Islamic Studies 373 (Topic: Gender Politics in the Islamic World), 373 (Topic 11), Middle Eastern Studies 322K (Topic: Gender Politics in the Islamic World), 341 (Topic: Gender Politics in the Islamic World), 341 (Topic 7), Religious Studies 358 (Topic: Gender Politics in the Islamic World), 358 (Topic 8), Sociology 321K (Topic: Gender Politics in the Islamic World), 336G, Women's and Gender Studies 340 (Topic: Gender Politics in the Islamic World), 340 (Topic 44). Additional prerequisite: Upper-division standing.

**Topic 9: Islamic Law.** Same as Islamic Studies 340 (Topic 5), Middle Eastern Languages and Cultures 321 (Topic 19), Middle Eastern Studies 342 (Topic 27), and Women's and Gender Studies 340 (Topic 27). Designed to give students a foundation in the substantive teachings of the shariah, which comprises not only what we normally think of as law, but also ethics and etiquette. Only one of the following may be counted: Islamic Studies 340 (Topic: Islamic Law), 340 (Topic 5), Middle Eastern Languages and Cultures 321 (Topic: Islamic Law), 321 (Topic 19), Middle Eastern Studies 342 (Topic 27), Religious Studies 358 (Topic: Islamic Law), 358 (Topic 9), Women's and Gender Studies 340 (Topic: Islamic Law), 340 (Topic 27).

**Topic 10: Classical Islamic Studies.** Same as Islamic Studies 340 (Topic 3), Middle Eastern Languages and Cultures 321 (Topic 15), and Middle Eastern Studies 342 (Topic 15). Only one of the following may be counted: Islamic Studies 340 (Topic 3), Middle Eastern Languages and Cultures 321 (Topic 15), Middle Eastern Studies 342 (Topic 15), Religious Studies 358 (Topic: Classical Islamic Studies), Religious Studies 358 (Topic 10). Additional prerequisite: Upper-division standing.

**Topic 11: Sacred and Ceremonial Textiles.** Same as Anthropology 324L (Topic 29), Islamic Studies 372 (Topic 11), Middle Eastern Languages and Cultures 321 (Topic 34), and Women's and Gender Studies 340 (Topic 57). Textiles and material objects indigenous to the Islamic world, and what they reveal about the culture of various Islamic societies. Only one of the following may be counted: Anthropology 324L (Topic 29), Islamic Studies 372 (Topic 11), Middle Eastern Languages and Cultures 321 (Topic: Sacred and Ceremonial Textiles), 321 (Topic 34), Middle Eastern Studies 328 (Topic: Sacred and Ceremonial Textiles), Religious Studies 358 (Topic: Sacred and Ceremonial Textiles), 358 (Topic 11), Textiles and Apparel 355 (Topic: Sacred and Ceremonial Textiles), Women's and Gender Studies 340 (Topic: Sacred and Ceremonial Textiles), 340 (Topic 57).

**Topic 12: Muslim Women: Past and Present I.** Same as Islamic Studies 372 (Topic 12) and Women's and Gender Studies 340 (Topic 22). Survey of the role of women in Islamic societies from the Middle Ages to the eighteenth century, with a glimpse into modern times. Only one of the following may be counted: Islamic Studies 372 (Topic 12), Religious Studies 358 (Topic: Muslim Women: Past and Present I), 358 (Topic 12) Women's and Gender Studies 340 (Topic 22). Additional prerequisite: Upper-division standing.

**Topic 13: Muslim Women: Past and Present II.** Same as Islamic Studies 372 (Topic 13) and Women's and Gender Studies 340 (Topic 23). Survey of the role of women in the modern Muslim world, with a glimpse into historical developments within Islamic societies. Only one of the following may be counted: Islamic Studies 372 (Topic 13), Religious Studies 358 (Topic: Muslim Women: Past and Present II), 358 (Topic 13), Women's and Gender Studies 340 (Topic 23). Additional prerequisite: Upper-division standing.

**Topic 14: Islamic Theology.** Same as Core Texts and Ideas 375 (Topic 2), Islamic Studies 340 (Topic 7), Middle Eastern Languages and Cultures 321 (Topic 27), and Middle Eastern Studies 342 (Topic 35). Three lecture hours per week for one semester. Only one of the following may be counted: Core Texts and Ideas 375 (Topic: Islamic Theology), 375 (Topic 2), Islamic Studies 340 (Topic: Islamic Theology), 340 (Topic 7), Middle Eastern Languages and Cultures 321 (Topic: Islamic Theology), 321 (Topic: 27), Middle Eastern Studies 321K (Topic: Islamic Theology), 342 (Topic: Islamic Theology), 342 (Topic: 35), Religious Studies 358 (Topic: Islamic Theology), 358 (Topic 14). Additional prerequisite: Upper-division standing.

**Topic 15: The Religions of the Middle East.** Same as Islamic Studies 340 (Topic 6), Middle Eastern Languages and Cultures 321 (Topic 26), and Middle Eastern Studies 342 (Topic 34). Three lecture hours per week for one semester. Only one of the following may be counted: Islamic Studies 340 (Topic: Religions of the Middle East), 340 (Topic 6), Middle Eastern Languages and Cultures 321 (Topic 26), Middle Eastern Studies 322K (Topic: Religions of the Middle East), 342 (Topic 34), Religious Studies 358 (Topic: Religions of the Middle East), 358 (Topic 15). Additional prerequisite: Upper-division standing.

**Topic 16: French Empire: The West and Islam.** Same as History 364G (Topic 7) and Islamic Studies 372 (Topic 22). The development of regions within the Mediterranean, variously called the West and East or Europe and Islam, with an emphasis on the role of modern France and France's Mediterranean empire. Three lecture hours for one semester. Only one of the following may be counted: History 364G (Topic: French Empire: The West and Islam), 364G (Topic 7), Islamic Studies 372 (Topic: French Empire: The West and Islam), 372 (Topic 22), Middle Eastern Studies 343 (Topic: French Empire: The West and Islam), Religious Studies 358 (Topic: French Empire: The West and Islam), 358 (Topic 16).

Topic 17: Arts of Islam, 650-1500. Same as Art History 328J. Early Islamic art and architecture, with an emphasis on interconnections between the Islamic world and Europe. Examines unique ways Islamic visual culture developed out of the classical and late antique world. Artworks will be contextualized within early Islamic history, religion, and culture. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 328J, 363 (Topic: Arts of Islam: Caliphs-Sultans), Islamic Studies 372 (Topic: Arts of Islam: Caliphs-Sultans), Middle Eastern Languages and Cultures 321 (Topic: Arts of Islam: Caliphs-Sultans), Middle Eastern Studies 321K (Topic: Arts of Islam: Caliphs-Sultans), 328 (Topic: Arts of Islam: Caliphs-Sultans), 342 (Topic: Arts of Islam: Caliphs-Sultans), Religious Studies 358 (Topic: Arts of Islam: Caliphs-Sultans), 358 (Topic 17). Topic 18: Arts of Islam 1500-Present. Same as Art History 328K. Later Islamic art and architecture, beginning with the world empires of the Ottomans, Safavids, and Mughals, and extending into the modern and contemporary periods. Subjects include the social and historical context of Islamic art in these periods and its unique visual culture. Three lecture hours a week for one semester. Only one of the following may be counted: Art History 328K, 363 (Topic: Arts of Islam, 1500-1800), 363 (Topic: Arts of Islam: 1500-Present), Islamic Studies 372 (Topic: Arts of Islam, 1500-1800), 373 (Topic: Arts of

Islam: 1500-Present), Middle Eastern Languages and Cultures 321 (Arts of Islam: 1500-Present), Middle Eastern Studies 321K (Topic: Arts of Islam, 1500-1800), 342 (Topic: Arts of Islam: 1500-Present), Religious Studies 358 (Topic 18).

**Topic 19: Muslim Women in Politics.** Same as Islamic Studies 372 (Topic 23) and Women's and Gender Studies 340 (Topic 56). Only one of the following may be counted: Anthropolgy 324L (Topic: Muslim Women in Politics), Islamic Studies 372 (Topic: Muslim Women in Politics), 372 (Topic 23), Religious Studies 358 (Topic: Muslim Women in Politics), 358 (Topic 19), Women's and Gender Studies 340 (Topic: Muslim Women in Politics), 340 (Topic 56).

**Topic 20: Gender and Art in the Muslim World**. Same as Asian Studies 372 (Topic 46), Islamic Studies 373 (Topic 15), Middle Eastern Languages and Cultures 321 (Topic 31), Middle Eastern Studies 342 (Topic 40), and Women's and Gender Studies 340 (Topic 62). Only one of the following may be counted: Asian Studies 372 (Topic: Gender and Art in Muslim World), 372 (Topic 46), Islamic Studies 373 (Topic: Gender and Art in Muslim World), 373 (Topic 15), Middle Eastern Languages and Cultures 321 (Topic: Gender and Art in Muslim World), 373 (Topic: 15), Middle Eastern Languages and Cultures 321 (Topic: Gender and Art in Muslim World), 321 (Topic 31), Middle Eastern Studies 342 (Topic: Gender and Art in Muslim World), 342 (Topic 40), Religious Studies 358 (Topic: Gender and Art in Muslim World), 358 (Topic 20), Women's and Gender Studies 340 (Topic: Gender and Art in Muslim World), 340 (Topic 62). Prerequisite: Upper-division standing.

**Topic 21: Graffiti and Poster Art in the Islamic World.** Same as Anthropology 324L (Topic 59), Islamic Studies 373 (Topic 17), Middle Eastern Languages and Cultures 321 (Topic 36), Middle Eastern Studies 342 (Topic 44), and Women's and Gender Studies 340 (Topic 67). Only one of the following may be counted: Anthropology 324L (Topic: Graffiti/Poster Art: Islam World), 324L (Topic 59), Islamic Studies 373 (Topic: Graffiti/Poster Art: Islam World), 373 (Topic 17), Middle Eastern Languages and Cultures 321 (Topic: Graffiti/Poster Art: Islam World), 321 (Topic 36), Middle Eastern Studies 342 (Topic: Graffiti/Poster Art: Islam World), 342 (Topic 44), Religious Studies 358 (Topic: Graffiti/Poster Art: Islam World), 358 (Topic 21), Women's and Gender Studies 340 (Topic: Graffiti/Poster Art: Islam World), 340 (Topic 67). Prerequisite: Upper-division standing.

**Topic 22:** Islam in the Early Modern World: Religion and Culture. A history of the religious and cultural developments across the Islamic world between the thirteenth and eighteenth centuries, stemming from the rise of the Mongols and the end of the caliphate. Explores the early modern Muslim empires of the Ottomans, Safavids, and the Mughals. Three lecture hours a week for one semester. Only one of the following may be counted: History 364G (Topic: Islam Early Mod World:Rel/Cult), Islamic Studies 372 (Topic: Islam Early Mod World:Rel/Cult), Middle Eastern Studies 343 (Topic: Islam Early Mod World:Rel/Cult), Religious Studies 358 (Topic: Islam Early Mod World:Rel/Cult), 358 (Topic 22). Additional prerequisite: Upper-division standing.

**Topic 23: Saints and Shrines in Islam.** Same as Asian Studies 340 (Topic 23). A survey of the history of sainthood (walayat) in Islam and the religious customs surrounding saint shrines in Muslim societies across the Middle East, Central Asia, and South Asia. Only one of the following may be counted: Asian Studies 340 (Topic: Saints & Shrines In Islam), 340 (Topic 23), Religious Studies 358 (Topic 23). Additional prerequisite: Upper-division standing.

**Topic 24: History of the Pilgrimage to Mecca, Hajj.** Same as History 364G (Topic 14) and Middle Eastern Studies 343 (Topic 7). Survey of the Hajj, Islam's major pilgrimage to Mecca and the nearby Holy Places. It will examine the Islamic pilgrimage from its beginnings in the seventh century C.E. through today. Three lecture hours a week for one semester. Only one of the following may be counted: History 364G (Topic: History of the Pilgrimage to Mecca, Hajj), 364G (Topic 14), Middle Eastern Studies 343 (Topic: History of the Pilgrimage to

Mecca, Hajj), 343 (Topic 7), Religious Studies 358 (Topic: History of the Pilgrimage to Mecca, Hajj), 358 (Topic 24).

# R S 358Q. Supervised Research.

Individual instruction. Prerequisite: Upper-division standing.

# R S 360. Topics in Religions of Sub-Saharan Africa.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

**Topic 1: Jesus, Africa, and History.** Same as African and African Diaspora Studies 372G (Topic 34). Exploration of the history of Christianity in Africa, from antiquity to the present, including the ways in which African interpretations and religious expressions of Christianity are presented in this history. Only one of the following may be counted: African and African Diaspora Studies 372G (Topic: Jesus, Africa, and History), 372G (Topic 34), Religious Studies 360 (Topic: Jesus, Africa, and History), 360 (Topic 1).

# R S 362. Independent Research in Religious Studies.

Faculty-directed research. Conference course. May be repeated for credit. Prerequisite: Upper-division standing and consent of instructor.

# R S 365. Topics in Ancient Religion.

Three lecture hours a week for one semester; additional hours may be required by some topics. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 1: Rome and Jerusalem. Same as Ancient History and Classical Civilization 325 (Topic 3), History 321G, Jewish Studies 365 (Topic 7), and Middle Eastern Studies 342 (Topic 21). A study of daily life in Israel during the Roman period, focusing on Jerusalem, ancient Palestinian synagogues and churches, Jewish and Christian symbolism, agriculture, warfare, and burial practices. Three lecture hours a week for one semester. Only one of the following may be counted: Ancient History and Classical Civilization 325 (Topic 3), Classical Civilization 348 (Topic: Rome and Jerusalem), History 321G, Jewish Studies 365 (Topic 7), Middle Eastern Studies 342 (Topic 21), Religious Studies 365 (Topic 1), Urban Studies 353 (Topic: Rome and Jerusalem). Additional prerequisite: Upper-division standing. Topic 3: In Search of King David. Same as Jewish Studies 363 (Topic 20), Middle Eastern Languages and Cultures 321 (Topic 18), and Middle Eastern Studies 342 (Topic 29). Only one of the following may be counted: Jewish Studies 363 (Topic: In Search of King David), 363 (Topic 20), Middle Eastern Languages and Cultures 321 (Topic: In Search of King David), 321 (Topic 18), Middle Eastern Studies 342 (Topic: In Search of King David), 342 (Topic 29), Religious Studies 365 (Topic: In Search of King David), 365 (Topic 3). Prerequisite: Upperdivision standing.

# R S 366. Topics in Religions of the Americas.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 2: Religions of the Caribbean.** Examines the histories and politics of religious practices in the Greater Caribbean, encompassing the islands and Central American coasts as well as the continental diasporas, from Vodou and Rastafari to popular Hinduism. Only one of the following may be counted: African and African Diaspora Studies 372G (Topic: Religions of the Caribbean), Anthropology 324L (Topic: Religions of the Caribbean), Latin American Studies 324L (Topic: Religions of the Caribbean), Religious Studies 366 (Topic: Religions of the Caribbean), 366 (Topic 2). Additional prerequisite: Upper-division standing.

Topic 3: The Bible in the Colonial Americas. Same as Core Texts and Ideas 375 (Topic 6), History 363K (Topic 5), and Latin American

Studies 366 (Topic 34). Varied perspectives on the central role played by the Old Testament in the construction of colonial cultures in the Americas. Only one of the following may be counted: Core Texts and Ideas 375 (Topic: The Bible in the Colonial Americas), 375 (Topic 6), History 363K (Topic: The Bible in the Colonial Americas), 363K (Topic 5), Latin American Studies 366 (Topic: The Bible in the Colonial Americas), 366 (Topic 34), Religious Studies 366 (Topic: The Bible in the Colonial Americas), 366 (Topic 3). Additional prerequisite: Upperdivision standing.

# R S 368. Topics in Religions of Latin America.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 1: Church and State in Latin America. Same as History 346W and Latin American Studies 366 (Topic 21: Church and State in Latin America). History of Church-state relations and religious politics in modern Latin America, with emphasis on the nineteenth to early twentieth-century periods. Only one of the following may be counted: History 346W, 363K (Topic Church and State in Latin America), Latin American Studies 366 (Topic 21), Religious Studies 368 (Topic 1). Prerequisite: Upper-division standing.

**Topic 3: The Religious Tradition in Latin America.** Same as History 350L (Topic 76) and Latin American Studies 366 (Topic 25). Explores the different ways in which religion has helped to define the political, social, and philosophical structures of Latin America from colonial times to the present. Only one of the following may be counted: History 350L (Topic: The Religious Tradition in Latin America), 350L (Topic 76), Latin American Studies 366 (Topic: The Religious Tradition in Latin America), 366 (Topic 25), Religious Studies 368 (Topic: The Religious Tradition in Latin America), 368 (Topic 3).

**Topic 4: Religion, Conquest, and Conversion in Colonial Latin America.** Same as History 363K (Topic 3) and Latin American Studies 366 (Topic 29). Focuses on the histories of the Catholic Church and religious devotion in colonial Latin America between 1521 and 1821. Only one of the following may be counted: History 363K (Topic: Religion, Conquest, and Conversion in Colonial Latin America), 363K (Topic 3), Latin American Studies 366 (Topic: Religion, Conquest, and Conversion in Colonial Latin America), 366 (Topic 29), Religious Studies 368 (Topic: Religion, Conquest, and Conversion in Colonial Latin America), 368 (Topic 4).

# R S 373. Topics in Comparative Religion.

Three lecture hours a week for one semester. Religious Studies 373 and 375S may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 3: Goddesses in World Religions and Cultures. Same as Asian Studies 340 (Topic 7) and Women's and Gender Studies 340 (Topic 30). Historical and cross-cultural overview of the relationship between feminine and religious cultural expressions through comparative examinations and analyses of various goddess figures in world religions. Only one of the following may be counted: Anthropology 324L (Topic: Goddesses in World Religions and Cultures), Asian Studies 340 (Topic 7), Religious Studies 373 (Topic: Goddesses in World Religions and Cultures), 373 (Topic 3), Women's and Gender Studies 340 (Topic: Goddesses in World Religions and Cultures), 340 (Topic 30). Additional prerequisite: Upper-division standing. Topic 4: Sport, Religion, and Society. Considers sport as it relates to ritual and religious practice and explores the meaning and nature of sport in cross-cultural perspectives. Only one of the following may be counted: Anthropology 324L (Topic: Sport, Religion, and Society), Religious Studies 373 (Topic: Sport, Religion, and Society), 373 (Topic

**Topic 5: Creation.** Same as European Studies 346 (Topic 13) and History 350L (Topic 80). Explores the writings of premodern authors

as related to creation and early developments in western theology, science, and philosophy. Only one of the following may be counted: European Studies 346 (Topic: Creation), 346 (Topic 13), History 350L (Topic: Creation), 350L (Topic 80), Religious Studies 373 (Topic: Creation), 373 (Topic 5), Women's and Gender Studies 345 (Topic: Creation).

Topic 8: Creation and Evolution: Human Origins in Scientific and Religious Discourses. Same as Anthropology 324L (Topic 68). Examines evolutionary theory, intelligent design, and creationism, and how they interact. Only one of the following may be counted: Anthropology 324L (Topic: Creation and Evolution in America), 324L (Topic 68), Religious Studies 346 (Topic: Creation and Evolution), 373 (Topic 8). Additional prerequisite: Upper-division standing. Topic 9: Extraterrestrial Intelligence: Culture, Religion, and Imagination. Same as Anthropology 324L (Topic 71). Focusing primarily on the 20th and 21st Centuries, explores the search for extraterrestrial intelligence (SETI) and considers how these ideas have intersected with other aspects of society, particularly religion, including recent arguments that SETI itself has developed into a religion. Examines meanings and motivations behind issues such as Percival Lowell's quest to prove the existence of canals on Mars and the development of Scientology. Only one of the following may be counted: Anthropology 324L (Topic: Sentience, Culture, and Religion: SETI), 324L (Topic 71), Religious Studies 373 (Topic: Sentience, Culture, and Religion: SETI), 373 (Topic 9).

# R S 373L. Science, Magic, and Religion.

Same as Anthropology 324C. Historical and cross-cultural overview of the constructed concepts of magic, science, and religion through comparative examinations of cultural contexts from the Islamic world, western Europe, the Caribbean, the U.S., and Mozambique. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 372G (Topic: Science, Magic, and Religion), American Studies 327 (Topic: Science, Magic, Religion), Anthropology 324L (Topic: Science, Magic, & Religion), 324C, Religious Studies 373 (Topic: Science, Magic, & Religion), 373 (Topic 6), 373L. Prerequisite: Upper-division standing.

# R S 373M. Biomedicine, Ethics, and Culture.

Same as Asian Studies 361 (Topic 29). Examines ethical questions such as the allocation of medical resources, stem cell research and cloning, organ transplantation, abortion, human experimentation, prolonging life and the right to die, suicide, euthanasia, and diagnosis and treatment of illnesses, explored from a global perspective. Three lecture hours a week for one semester. Only one of the following may be counted: Anthropology 324L (Topic: Biomedicine, Ethics, and Culture), Asian Studies 361 (Topic: Biomedicine, Ethics, and Culture), 361 (Topic 29), Religious Studies 373 (Topic: Biomedicine, Ethics, and Culture), 373M. Prerequisite: Upper-division standing.

# R S 375S. Advanced Seminars in Religious Studies.

Discussion and research-based study of topics in religious studies. Includes theoretical approaches to the study of religion. Three lecture hours a week for one semester. Religious Studies 373 and 375S may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and at least six semester hours of coursework in religious studies.

**Topic 1: What is Religion?.** Examines classic theories about religion from the last 150 years of academic study: psychological, sociological, economic, phenomenological, and anthropological. Religious Studies 373 (Topic: What is Religion?) and 375S (Topic 1) may not both be counted.

**Topic 2: Comparing Religions.** Same as Asian Studies 379 (Topic 10). A discussion of major comparative approaches in the study of

religion. Only one of the following may be counted: Asian Studies 340 (Topic: Introduction to Comparative Religion), 340 (Topic 11), 379 (Topic 10), Religious Studies 373 (Topic: Introduction to Comparative Religion), 375S (Topic 2). Additional prerequisite: For Asian studies majors, twelve semester hours of upper-division coursework in Asian studies; for others, upper-division standing and at least six semester hours of coursework in religious studies.

Topic 3: Mystics, Visionaries, and Heretics in Medieval Europe.

Same as Ancient History and Classical Civilization 330 (Topic 3) and History 350L (Topic 74). Examines particular mystical and visionary experiences within the context of medieval European Christianity. Only one of the following may be counted: Ancient History and Classical Civilization 330 (Topic: Mystics, Visionaries and Heretics in Medieval Europe), 330 (Topic 3), History 350L (Topic: Mystics, Visionaries and Heretics in Medieval Europe), 350L (Topic 74), Religious Studies 375S (Topic: Mystics, Visionaries and Heretics in Medieval Europe), 375S (Topic 3).

**Topic 4: Radical Religion: Ascetics and Holy Persons.** Same as Asian Studies 379 (Topic 8). Explores asceticism and the concepts, practices, and goals associated with this radical way of life through case studies from various religions. Subjects include theories of the body and of culture, as well as issues of social status, gender, devotion, and violence. Only one of the following may be counted: Asian Studies 379 (Topic: Radical Religion: Ascetics), 379 (Topic 8), Religious Studies 375S (Topic: Radical Religion: Ascetics), 375S (Topic 4).

**Topic 5: Religion, the Supernatural, and the Paranormal.** Examination of extraordinary events, such as miracles, exorcisms, ghosts, psychic abilities, UFOs, and other related phenomena. Discussion of the similarities and dissimilarities between religious and non-religious contexts for such happenings, as well as possible explanations for them. Religious Studies 375S (Topic: Religion, Supernatural, and the Paranormal) and Religious Studies 375S (Topic 5) may not both be counted.

**Topic 6: Religion in the American South.** Same as American Studies 327 (Topic 6). Examines the social construction and cultural meaning of southern religion using fictional characterizations, philosophical reflections, historical accounts, and theoretical comparisons. Only one of the following may be counted: American Studies 327 (Topic: Religion in the American South), 327 (Topic 6), Religious Studies 375S (Topic: Religion in the American South), 375S (Topic 6). Additional prerequisite: Upper-division standing and at least six semester hours of coursework in religious studies.

# R S 679H. Honors Tutorial Course.

Supervised individual reading for one semester, followed by research and writing to produce a substantial paper on a specific topic in religious studies, to be completed during the second semester. The equivalent of three lecture hours a week for two semesters. Prerequisite: For 679HA, upper-division standing and admission to the Religious Studies Honors Program; for 679HB, Religious Studies 679HA.

# Department of Rhetoric and Writing

The Department of Rhetoric and Writing offers the required core course, Rhetoric and Writing 306, as well as lower-division and upper-division courses in rhetoric and writing, and a number of courses with a writing flag. The department also administers the Undergraduate Writing Center, which supports writing instruction in all undergraduate courses and the Digital Writing and Research Lab, which offers innovative approaches to writing in digital environments. If a student has received either a passing or a failing grade or the symbol *Q* in Rhetoric and Writing 306, he or she may not earn credit by examination for the course.

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

# **Rhetoric and Writing: RHE**

# **Lower-Division Courses**

# RHE 306 (TCCN: ENGL 1301). Rhetoric and Writing.

An introductory writing course that includes instruction in practical reasoning and the principles of rhetoric. Three lecture hours a week for one semester. Only one of the following may be counted: English 603A, 303C, Rhetoric and Writing 306, 306Q, Tutorial Course 603A, 303C. Prerequisite: A passing score on the writing section of the Texas Higher Education Assessment (THEA) test (or an appropriate assessment test).

# RHE 306Q. Rhetoric and Writing for Nonnative Speakers of English.

Enrollment limited to nonnative speakers of English. An introductory writing course that includes instruction in practical reasoning and the principles of rhetoric, as well as grammar and mechanics of standard American English. Five lecture hours a week for one semester. Only one of the following may be counted: English 603A, 303C, Rhetoric and Writing 306, 306Q, Tutorial Course 603A, 303C. Prerequisite: Students must present their scores on the Test of English as a Foreign Language (TOEFL) to the Rhetoric and Writing Office prior to registering.

# RHE 309K, 409K. Topics in Writing.

A writing course focused on studying and practicing methods of rhetorical analysis within the contexts of disputed issues of academic, political, or cultural significance. Three or four lecture hours a week for one semester. May be repeated once for credit when the topics vary. Prerequisite: Rhetoric and Writing 306 or 306Q.

# RHE 309S. Critical Reading and Persuasive Writing.

A writing course designed to teach advanced rhetorical analysis and advocacy on public issues. Three lecture hours a week for one semester. Prerequisite: Rhetoric and Writing 306 or 306Q.

# RHE 310. Intermediate Expository Writing.

An intensive writing workshop, focusing on style and readability. Three lecture hours a week for one semester. Prerequisite: English 603A, Rhetoric and Writing 306, 306Q, or Tutorial Course 603A.

# RHE 312. Writing in Digital Environments.

A writing course focused on using, interpreting, and analyzing traditional and emerging technologies. Taught using networked computers. Three lecture hours a week for one semester. Prerequisite: Rhetoric and Writing 306.

# **RHE 315. Introduction to Visual Rhetoric.**

A writing course designed to teach students to analyze and produce visual and nonverbal forms of rhetoric. Three lecture hours a week for one semester. Prerequisite: Rhetoric and Writing 306.

# RHE 317 (TCCN: ENGL 2311). Technical Writing.

Reading and writing in professional and technological environments. Three lecture hours a week for one semester. Prerequisite: English 603A, Rhetoric and Writing 306, 306Q, or Tutorial Course 603A.

# RHE 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Rhetoric and Writing.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Rhetoric and Writing. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

# **Upper-Division Courses**

# RHE 321. Principles of Rhetoric.

Examines major terms, issues, and approaches in the theory and practice of rhetoric and writing. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and one of the following: English 303C, Rhetoric and Writing 306, 306Q, or Tutorial Course 303C.

# RHE 325M. Advanced Writing.

An advanced course designed to improve and refine writing. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and one of the following: English 303C, Rhetoric and Writing 306, 306Q, or Tutorial Course 303C.

# RHE 328. Topics in Professional and Technical Writing for Liberal Arts Majors.

A professional and technical writing course exploring topics such as writing for nonprofit organizations, writing for government, and writing for industry. Designed for students in nontechnical fields. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and one of the following: English 303C, Rhetoric and Writing 306, 306Q, or Tutorial Course 303C.

**Topic 1: Magazine Writing and Publishing.** Introduction to magazine writing, editing, and publishing, with an emphasis on the nonfiction article.

Topic 2: Writing for Nonprofits. Studies the writing genres and rhetorical strategies that are routinely used in nonprofit organizations. Covers business reports, grant writing, and feature writing. Topic 3: Principles of Technical Writing. Writing practical documents that help readers follow procedures, make informed choices, and understand complex information.

**Topic 4: Writing for Entrepreneurs.** Studies the genres and rhetorical strategies that entrepreneurs use to persuade stakeholders, including heuristics for developing business models, market reports, and pitches. Rhetoric and Writing 328 (Topic: Writing for Entrepreneurs) and 328 (Topic 4) may not both be counted.

# RHE 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Rhetoric and Writing.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Rhetoric and Writing. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

# RHE 330C. Advanced Studies in Digital Rhetoric.

An advanced course that examines the role of information technologies in communication. Taught using networked computers. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and one of the following: English 303C, Rhetoric and Writing 306, 306Q, or Tutorial Course 303C.

Topic 1: Rhetorics of Cyberculture. Examines the ways cyberspace is represented, critiqued, and employed in writing and film. Explores the social, ethical, and political implications of networked culture. Topic 2: Designing Text Ecologies. Explores the function and interaction of texts in the workplace. Emphasis on research, analysis, and design of the strategic, tactical, and operational aspects of texts. Topic 3: Knowledge Ecologies. Explores systems of people, technologies, social structures, and their environments where energy, information, and resources are transformed into knowledge that can be used to further shape our lives and our worlds. Rhetoric and Writing 330C (Topic: Knowledge Ecologies) and 330C (Topic 3) may not both be counted.

**Topic 4: Writing and Photography.** Examination of issues in the history of photography and how images and words work in combination. Emphasis on improving skills in analysis, writing, and photography. Rhetoric and Writing 330C (Topic: Writing and Photography) and 330C (Topic 4) may not both be counted.

**Topic 5: Ethics and New Media.** Exploration of contemporary ethical dilemmas and principles arising with emergent technologies, and their impact on rhetoric and writing. Rhetoric and Writing 330C (Topic: Ethics and New Media) and 330C (Topic 5) may not both be counted. **Topic 6: Networked Writing.** Examines how writers present themselves and their arguments across a range of media and genres. Practices rhetorical skills within digital networks. Rhetoric 330C (Topic: Networked Writing) and 330C (Topic 6) may not both be counted. **Topic 7: Digital Storytelling.** Examines and practices the development of narrative through multiple media (audio, visual, video, et al). Rhetoric and Writing 330C (Topic: Digital Storytelling) and 330C (Topic 7) may not both be counted.

**Topic 8: Writing with Sound.** Introduces sound studies and practices techniques for recording, editing, and publishing writing for and with sound. Rhetoric and Writing 330C (Topic: Writing with Sound) and 330C (Topic 8) may not both be counted.

**Topic 9: Digital Self and Rhetoric.** Examines the pervasiveness of digital culture and cultivates strategies for presenting one's digital self through academic, professional, and civic venues. Rhetoric and Writing 330C (Topic: Digital Self and Rhetoric) and 330C (Topic 9) may not both be counted.

# RHE 330D. History of Rhetoric.

An advanced survey of figures and movements in the history of rhetoric, from classical to contemporary. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and one of the following: English 303C, Rhetoric and Writing 306, 306Q, or Tutorial Course 303C.

**Topic 1: Sophistry and the Invention of Rhetoric.** Examines the role of sophists and sophistry in the development and practice of rhetoric as an art, from antiquity to modern times.

**Topic 2: Kairos and the Rhetorical Situation.** Introduction to kairos, a key concept in rhetorical theory from ancient to modern times, that focuses attention on making a text appropriate for its historical situation. Explores why some writing succeeds at attracting attention and inspiring action, while some writing fails.

**Topic 3: Deliberating War.** Studies the recurrent means of making arguments for and against war, and the role of rhetoric in public deliberation. Rhetoric and Writing 330D (Topic: Pro- and Anti-War Rhetoric) and 330D (Topic 3) may not both be counted.

**Topic 4: Rhetoric and Racism.** Explores theories of rhetoric by examining arguments about group identity, from Athenian discussions of "barbarism" in the fourth century BC to nineteenth-century arguments about citizenship.

**Topic 5: History of Public Argument.** A survey of the practice and theory of argumentation, with particular attention to its civic and political uses and implications.

**Topic 6: Classical to Modern Rhetoric.** Surveys the works of major rhetorical theorists and practitioners in the Western tradition from the ancient Greeks to the present.

**Topic 7: Rhetoric Invented, Revised, Retold.** Survey of figures, movements, and debates in the history of rhetoric and exploration of the rise of revisionist historiography and comparative rhetoric in the twenty-first century. Rhetoric and Writing 330D (Topic: Rhetoric Invented/Revised/Retold) and 330D (Topic 7) may not both be counted.

**Topic 8: Philosophy Versus Rhetoric.** Study of the co-emergence and subsequent split between rhetoric and philosophy in the classical period and their potential reunification in a contemporary context. Rhetoric and Writing 330D (Topic: Philosophy vs Rhetoric) and 330D (Topic 8) may not both be counted.

**Topic 9: Rhetoric in the English Renaissance.** Examination of how the art of rhetoric, developed in ancient times by the Greeks and Romans, was understood and debated during the European Renaissance, particularly in England. Rhetoric and Writing 330D (Topic: Rhetoric in the English Renaissance) and 330D (Topic 9) may not both be counted.

**Topic 10: Arguing with Liberals.** A survey of liberal political theory from the late seventeenth through the twentieth centuries with special attention to theories and practices of public argumentation. Rhetoric and Writing 330D (Topic: Arguing with Liberals) and 330D (Topic 10) may not both be counted.

# RHE 330E. Rhetorical Theory and Analysis.

An advanced examination of rhetorical theories and their applications. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and one of the following: English 303C, Rhetoric and Writing 306, 306Q, or Tutorial Course 303C.

Topic 1: Rhetoric of Science in Popular Media. Rhetorical analysis of scientific discourse and how it is represented in popular media, including news reports, magazines, and popular nonfiction. Topic 2: Demagoguery. Examines material produced by rhetors commonly considered demagogues and assesses the scholarly discussions of these individuals.

**Topic 3: Democracy and the Media.** Rhetorical analysis, with particular attention to the effects of technologies and journalistic institutions on public deliberation.

**Topic 4: Modern Rhetorical Criticism.** Use of contemporary critical methods to investigate, interpret, and explain rhetorical acts and artifacts. Rhetoric and Writing 330E (Topic: Modern Rhetorical Criticism) and 330E (Topic 4) may not both be counted.

**Topic 5: Comparative Rhetoric.** Examination of rhetorical concepts and practices in various rhetorical traditions, and how they underline the functions of rhetoric in their different historical and cultural contexts. Rhetoric and Writing 330E (Topic: Comparative Rhetoric) and 330E (Topic 5) may not both be counted.

**Topic 6: Nonargumentative Rhetoric in Zen.** Exploration of unconventional uses of language including contradiction, negation, story, surprise, gesture, and silence are used in Zen training as resources for transformational change. Rhetoric and Writing 330E (Topic: Nonargumentative Rhetoric in Zen) and 330E (Topic 6) may not both be counted.

Topic 7: Psychology of Writing and Persuasion.

**Topic 8: Pathos.** Examines the persuasive power of emotion in critical thinking and prudent judgment. Rhetoric and Writing 330E (Topic: Pathos) and 330E (Topic 8) may not both be counted.

# RHE 360M. Rhetoric and Writing for Teachers of English.

Designed for students seeking a secondary school teaching certificate or those in the UTeach-Liberal Arts program. An advanced course that examines theories of writing and writing pedagogy. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and one of the following: English 303C, Rhetoric and Writing 306, 306Q, or Tutorial Course 303C.

# RHE 366. Internship in Rhetoric and Writing.

Research and staff experience working in an appropriate nonprofit, public-, or private-sector entity. Ten to twelve hours a week for one semester. May be repeated once for credit when the internships vary. Offered on the pass/fail basis only. Prerequisite: Upper-division standing, twelve semester hours of coursework in rhetoric and writing, and consent of instructor.

# RHE 367R. Conference Course in Rhetoric and Writing.

Supervised work on specific projects in rhetoric and writing. Three conference hours a week for one semester. May be repeated for credit. Prerequisite: Upper-division standing; one of the following: English 303C, Rhetoric and Writing 306, 306Q, or Tutorial Course 303C; and approval of written application by the supervising instructor.

# RHE 368C. Writing Center Internship.

Intensive reading, writing, and discussion in writing center theory and philosophy, tutoring methods, and writing pedagogy, as well as a review of standard American English usage and mechanics; followed by a supervised apprenticeship as a peer consultant in the Undergraduate Writing Center. Two lecture hours and two apprenticeship hours a week for one semester. Prerequisite: Upper-division standing; one of the following: English 303C, Rhetoric and Writing 306, 306Q, or Tutorial Course 303C; and approval of written application by instructor.

# RHE 368E. Editing for Publication.

Advanced instruction in revising and editing for publication. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and one of the following: English 303C, Rhetoric and Writing 306, 306Q, or Tutorial Course 303C.

**Topic 1: The Book: Prospectus to Proofs.** Designed to make students better writers and more careful editors, the course includes creation of a simulated book from proposal stage to editing of final page proofs. **Topic 2: Grammar for Writers, Editors, and Teachers.** Examines the grammar of written English by assessing grammatical issues, handbooks, and controversies.

# RHE 375. Capstone Seminars in Rhetoric.

Allows the student to integrate the knowledge gained in rhetoric and writing through a major independent project. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing, and Rhetoric and Writing 321, 330C, 330D, and 330E.

# RHE 379C. Advanced Topics in Rhetoric and Writing.

An advanced course focused on specific theories or practices of rhetoric and writing. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and one of the following: English 303C, Rhetoric and Writing 306, 306Q, or Tutorial Course 303C.

# RHE 679H. Honors Tutorial Course.

Research and development of a thesis/project topic and proposal followed by the writing and defense of an honors thesis or development and defense of an honors project. The equivalent of three lectures hours

a week for two semesters. Prerequisite: For 679HA, upper-division standing, completion of at least six hours of upper-division rhetoric and writing courses, admission to the Rhetoric and Writing Honors Program, and consent of the honors adviser; for 679HB, credit for 679HA.

# **Department of Air Force Science**

The Air Force Reserve Officer Training Corps (AFROTC) was activated at the University of Texas in September, 1947. The program is designed to commission career-oriented officers who meet specific Air Force requirements. The AFROTC objective is to place on active duty lieutenants who demonstrate dedication to their assignments, willing acceptance of responsibility, critical and creative thinking, and the ability to speak and write effectively.

AFROTC courses are taught by Air Force officers and are approved for college credit toward the cadet's degree program in amounts determined by the college concerned.

AFROTC scholarships are available to selected cadets. Scholarships are awarded on the basis of overall merit, with particular attention paid to academic achievement. Recipients must maintain academic standards in order to retain the scholarships. Other scholarships are also available for upper-division cadets. Additional information is available from the chair of the department.

Extracurricular activities available through AFROTC include; intramural athletics, parades, ceremonies, formal military functions, field trips to Air Force installations, and membership in national military societies.

Air force science courses are designed to prepare selected students for a commission in the United States Air Force through the AFROTC program. Students who do not hold AFROTC scholarships may take lower-division courses with no military obligation. Scholarship students and selected students who elect to take upper-division courses are on contract. Upon graduation and commissioning he/she will enter active duty in the United States Air Force.

# Air Force Science: AFS

# **Lower-Division Courses**

# AFS 100. Leadership Laboratory.

Various leadership techniques, including drill and ceremonies, customs and courtesies, and uniform standards. Two laboratory hours a week for one semester. Offered on the pass/fail basis only.

# AFS 102K. The Foundations of the United States Air Force I.

Provides an introduction to the Air Force (AF), allowing students to examine general aspects of the Department of the Air Force, AF Leadership, AF benefits, and opportunities for AF officers; lays the foundation for becoming an Airman, including AF customs and courtesies, AF dress and appearance, team building, communication skills, AF Core values, and more. Provides a knowledge-level understanding of United States military operations, principles of war, and airpower from an institutional, doctrinal, and operational perspective. One lecture hour a week for one semester. Offered in the fall semester only. Prerequisite: Concurrent enrollment in Air Force Science 100.

# AFS 102L. The Foundations of the United States Air Force II.

Continuation of Air Force Science 102K. One lecture hour a week for one semester. Prerequisite: Concurrent enrollment in Air Force Science 100.

# AFS 111K. The Evolution of USAF Air and Space Power I.

Examines general aspects of the operational employment of air and space power through a historical and institutional lens. Utilizing these perspectives, the course examines principles of war and tenets of air and space power, summarizes the importance of joint operations to the military operating environment, and explores concepts of interpersonal leadership through the use of operational examples. One lecture hour a week for one semester. Prerequisite: Concurrent enrollment in Air Force Science 100.

# AFS 111L. The Evolution of USAF Air and Space Power II.

Continuation of Air Force Science 111K. One lecture hour a week for one semester. Offered in the spring semester only. Prerequisite: Concurrent enrollment in Air Force Science 100.

# **Upper-Division Courses**

# AFS 120L. Leadership Laboratory.

Leadership laboratory course for upper-division students. Further development of leadership skills through leadership positions within the cadet corps. Includes training of freshman and sophomore students as well as a practicum in Air Force unit operation. Two laboratory hours a week for one semester. Offered on the pass/fail basis only.

# AFS 321. Air Force Leadership Studies I.

Study of leadership, management fundamentals, professional knowledge, Air Force personnel and evaluation systems, leadership ethics, and communication skills required of an Air Force officer. Case studies throughout the course examine Air Force leadership and management situations as a means of demonstrating and exercising practical application of the concepts being studied. Three lecture hours a week for one semester. Prerequisite: Air Force Science 102K, 102L, 111K, and 111L; concurrent enrollment in Air Force Science 120L; and completion a of field training course or equivalent ROTC or military training.

# AFS 322. Air Force Leadership Studies II.

Continuation of Air Force Science 321. Three lecture hours a week for one semester. Offered in the spring semester only. Prerequisite: Air Force Science 321 and concurrent enrollment in Air Force Science 120L.

# AFS 333. Senior Air Force Studies I.

Examines national security policy making, decision, and execution processes, regional studies, advanced leadership ethics, and Air Force doctrine. Special subjects of interest focus on the military as a profession, officership, military justice, civilian control of the military, preparation for active duty, and current issues affecting military professionalism. Within this structure, continued emphasis is given to refining communication skills. Three lecture hours a week for one semester. Air Force Science 331 and 333 may not both be counted. Prerequisite: Air Force Science 322 and concurrent enrollment in Air Force Science 120L.

# AFS 335. Senior Air Force Studies II.

Continuation of AFS 333. Three lecture hours a week for one semester. Air Force Science 332 and 335 may not both be counted. Prerequisite: Air Force Science 333, and concurrent enrollment in Air Force Science 120L or consent of the department chair.

# **Department of Military Science**

The Army Reserve Officers' Training Corps (ROTC) was established at the University of Texas in September, 1947. As a senior division unit, it is designed to provide a course of military instruction that will permit qualified students to prepare themselves for commissions as second lieutenants while they pursue other academic courses leading to baccalaureate or advanced degrees from the University. Upon being commissioned a second lieutenant, each student has the opportunity to serve in the active Army, Army Reserve, or National Guard.

The Army ROTC program, in addition to providing a basic foundation in military subjects, is designed to develop the highest qualities of leadership, character, and citizenship through the wide variety of extracurricular activities it sponsors. Such activities include parades, ceremonies, social events, a Ranger detachment, and intramural athletic teams.

The Army ROTC program is normally a four-year program divided into a basic course and an advanced course. The basic course is conducted during the first two years and the advanced course during the last two years. Certain students may qualify for advanced placement in the program based on previous military training in Junior ROTC, a service academy, active duty in a military service, credit for other college courses, or completion of a special four-week summer camp, normally between the sophomore and junior year.

The Department of the Army has determined that a need exists for all Army ROTC cadets to have a demonstrated proficiency in selected disciplines. These courses are called Professional Military Education (PME) and must be completed prior to graduation. A list of courses that fulfill PME requirements is available from the chair of the Department of Military Science.

Two-, three-, and four-year scholarship programs are offered to selected cadets. The four-year scholarship program is administered by the Department of the Army, but selection is based on the Professor of Military Science Order of Merit List (OML). Applicants must apply while in high school. The remaining programs are administered directly through the Department of Military Science.

Scholarship students receive \$300 to \$500 a month for up to ten months for each year of their scholarship. The scholarship pays for required tuition and mandatory fees, laboratory expenses, and books. Nonscholarship students receive \$450 to \$500 a month during the advanced course. For additional information, contact the scholarship and enrollment officer at arotc@uts.cc.utexas.edu or https:// liberalarts.utexas.edu/arotc/.

# **Military Science: M S**

# **Lower-Division Courses**

# M S 000. Leadership Laboratory.

Open only to students in associated military science courses. Leadership responsibilities for planning, coordination, execution, and evaluation of training and other activities. Self-confidence and team-building leadership skills that can be applied throughout life. One and one-half laboratory hours a week for one semester. Required of all military science students. Prerequisite: Concurrent enrollment in another military science course.

# M S 304. American Military History: 1775 to Present.

Covers development of American Profession of Arms from a "dual military tradition" evaluating military leadership at the tactical, operational, and strategic levels of war. Explores ways in which Industrial Revolution transformed the United States and other societies organized armed violence. Three lecture hours a week for one semester.

# M S 209. Basic Military Science I-A.

Two lecture hours and three laboratory hours a week for one semester Military Science 101, 201 and 209 may not both be counted. Prerequisite: Concurrent Enrollment in Military Science 000.

# M S 209K. Basic Military Science I-B.

Two lecture hours and three laboratory hours a week for one semester Military Science 103, 203 and 209K may not both be counted. Prerequisite: Concurrent enrollment in Military Science 000.

# M S 219. Basic Military Science II-A.

Two lecture hours and three laboratory hours a week for one semester. Military Science 210 and 219 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Concurrent enrollment in Military Science 000.

# M S 219K. Basic Military Science II-B.

Two lecture hours and three laboratory hours a week for one semester. Military Science 212 and 219K may not both be counted. Offered on the letter-grade basis only. Prerequisite: Concurrent enrollment in Military Science 000.

# **Upper-Division Courses**

# M S 329. Advanced Military Science III-A.

Three lecture hours a week for one semester. Military Science 320 and 329 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Concurrent enrollment in Military Science 000 and approval of departmental representative.

# M S 329K. Advanced Military Science III-B.

Three lecture hours and three laboratory hours a week for one semester. Military Science 320K and 329K may not both be counted. Offered on the letter-grade basis only. Prerequisite: Concurrent enrollment in Military Science 000 and approval of departmental representative.

# M S 339. Advanced Military Science IV-A.

Three lecture hours and two laboratory hours a week for one semester. Military Science 339 and 375 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Concurrent enrollment in Military Science 000 and approval of departmental representative.

# M S 339K. Advanced Military Science IV-B.

Three lecture hours a week for one semester. Military Science 339K and 375K may not both be counted. Offered on the letter-grade basis only. Prerequisite: Concurrent enrollment in Military Science 000 and approval of departmental representative.

# M S 379. Advanced Military Science V-A.

Advanced study of planning, executing, and assessing complex operations. Composed primarily of independent study, cadets are given opportunities to plan and execute events, assess risk, make ethical decisions, and lead fellow ROTC cadets. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Concurrent enrollment in Military Science 000.

# M S 379K. Advanced Military Science V-B.

Advanced study of planning, executing, and assessing complex operations. Composed primarily of independent study, cadets are given opportunities to plan and execute events, assess risk, make ethical decisions, and lead fellow ROTC cadets. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Concurrent enrollment in Military Science 000.

# **Department of Naval Science**

The Naval Reserve Officers Training Corps (NROTC) was established at the University of Texas in September, 1940, to offer the naval science

courses necessary to qualify University students for commissions in the United States Navy or Marine Corps.

Qualified students may apply for the four-year or two-year Navy-Marine Scholarship Program or college program (nonscholarship) and earn a commission in the Navy or Marine Corps.

NROTC scholarship students are appointed midshipmen, United States Naval Reserve, by the Secretary of the Navy, and granted the compensation and benefits authorized by law. While students attend the University, the Navy pays tuition, the cost of textbooks, fees of an instructional nature, and a subsistence allowance of \$250 to \$450 a month during the academic year. During drill periods and summer training periods, midshipmen wear government-furnished uniforms. Students should submit scholarship applications to a naval recruiting station before December 1 of each year or to the Department of Naval Science after the first semester of enrollment in the college program. Additional information is available from the chair of the department.

# Naval Science: N S

# **Lower-Division Courses**

# N S 000. Drill.

Three laboratory hours a week for one semester.

# N S 302. Introduction to Naval Science.

A general introduction to sea power and the naval service, including the mission, organization, regulations, warfare components, and personnel programs. Three lecture hours a week for one semester.

# N S 312. Sea Power and Maritime Affairs.

A consideration of the influence of sea power, naval history, and maritime affairs on current events and national policy. Three lecture hours a week for one semester. Prerequisite: Consent of instructor.

# N S 315. Naval Engineering.

Introduction to types, structures, and purposes of naval ships and systems. Three lecture hours a week for one semester. Naval Science 603 and 315 may not both be counted. Offered on the letter-grade basis only.

# N S 316. Naval Weapons Systems.

Introduction to types, capabilities, and purposes of Naval weapons systems. Three lecture hours a week for one semester. Naval Science 603 and 316 may not both be counted. Offered on the letter-grade basis only.

# **Upper-Division Courses**

# N S 326. Evolution of Warfare.

Explores the forms of warfare employed by great leaders in history as they relate to the evolution of warfare. Three lecture hours a week for one semester. Prerequisite: Consent of instructor.

# N S 329. Navigation and Naval Operations I.

An introduction to piloting, a survey of navigational aids, and a study of the Rules of the Nautical Road. Three lecture hours a week for one semester.

# N S 330. Leadership and Ethics.

Principles of leadership and ethics reinforced through seminar discussion and case studies. Discussion of the duties and responsibilities of a naval officer. Three lecture hours a week for one semester. Prerequisite: Naval Science 335 and consent of instructor.

#### N S 335. Leadership and Management.

Study of leadership and management theory in organizations, with emphasis on examining the leadership process in the context of the dynamic interaction of the leader, the followers, and the situation. Three lecture hours a week for one semester. Prerequisite: Consent of instructor.

# N S 336. Fundamentals of Maneuver Warfare.

Intended for Naval ROTC students. Focuses on the evolution of the United States Marine Corps as a maneuver warfare organization, with particular attention devoted to the structure and capabilities of the present day USMC as a forward deployed and rapid deployment force and the development of Expeditionary Maneuver Warfare concepts. Three lecture hours a week for one semester. Offered on the letter-grade basis only.

# N S 362. Amphibious Warfare.

Defines the concept of amphibious warfare, explores its doctrinal origins, and traces its evolution as an element of naval policy during the twentieth century. Three lecture hours a week for one semester.

# N S 369. Navigation and Naval Operations II.

Study of the celestial sphere and nautical astronomy to determine positions on the earth by mathematical analysis, and an introduction to relative motion and the maneuvering board. Three lecture hours a week for one semester.

# Center for Russian, East European, and Eurasian Studies

# Russian, East European, and Eurasian Studies: REE

# **Lower-Division Courses**

# REE 301. Introduction to Russian, East European, and Eurasian Studies.

An introduction to the former Soviet Union and Eastern Europe through each of the major disciplines represented in the program: language, literature, anthropology, geography, history, government, sociology, and economics. Three lecture hours a week for one semester. Only one of the following may be counted: History 306N (Topic 4), Russian, East European, and Eurasian Studies 301, Slavic 301 (Topic 2). Only one of the following may be counted: Government 314 (Topic 4), Russian, East European, and Eurasian Studies 301, Slavic 301 (Topic 2). Only one of the following may be counted: Russian, East European, and Eurasian Studies 301, Slavic 301 (Topic: Introduction to Russian, East European, and Eurasian Studies), 301 (Topic 2).

# **REE 301L.** Introduction to Russian Literature.

Introduction to Russian literature of the modern period, from the late eighteenth century to the present. Explores a variety of genres, from fairy tales to the works of Pushkin, Gogol, Dostoevsky, Tolstoy, Chekhov, Bulgakov, and Pelevin. All reading and instruction is in English. Three lecture hours a week for one semester.

# REE 302. Topics in Russian, East European, and Eurasian Studies.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: The Vampire in Slavic Cultures.** Same as Comparative Literature 305 (Topic 2) and European Studies 307 (Topic 1). Examines the vampire in the cultures of Russia and Eastern Europe, including manifestations in literature, religion, art, film, and common practices from its origins to present. Only one of the following may be counted: Comparative Literature 305 (Topic: The Vampire in Slavic Cultures), 305 (Topic 2), European Studies 307 (Topic: The Vampire in Slavic Cultures), 307 (Topic 1), Russian, East European, and Eurasian Studies 302 (Topic: The Vampire in Slavic Cultures), 302 (Topic 1), Slavic 301 (Topic: The Vampire in Slavic Cultures), 301 (Topic 1).

**Topic 2: Prague, Magic, and the Struggle for Power.** Same as History 306N (Topic 14). Examines historical texts from four different magical traditions to find the truth behind the fiction and the historical events that sometimes permitted and sometimes persecuted the religions, philosophies, and sciences that some call magic. Only one of the following may be counted: Czech 301K (Topic: Magic and Power in Prague: The Struggle for Power), 301K (Topic 2), History 306N (Topic 14), Religious Studies 306 (Topic: Magic and Power in Prague: The Struggle for Power), Russian, East European, and Eurasian Studies 302 (Topic: Magic and Power in Prague: The Struggle of Power), 302 (Topic 2).

Topic 3: Introduction To Czech History and Culture: Puppets, Pubs, And Polyglots. Same as European Studies 307 (Topic 2). Survey of Czech history and culture from the middle ages to the present day. Subjects include the culture of daily life, literature, history, philosophy, and the arts. Only one of the following may be counted: Czech 301K (Topic: Puppets, Pubs And Polyglots: Introduction To Czech History and Culture), 301K (Topic 3), European Studies 307 (Topic: Puppets, Pubs And Polyglots: Introduction To Czech History and Culture), 307 (Topic 2), Russian, East European, and Eurasian Studies 302 (Topic: Puppets, Pubs And Polyglots: Introduction To Czech History and Culture), 302 (Topic 3).

# REE 318Q. Supervised Research.

Individual instruction.

#### REE 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Russian, East European, and Eurasian Studies.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Center for Russian, East European, and Eurasian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

# **Upper-Division Courses**

# REE 325. Topics in Language, Literature, and Culture.

Three lecture hours a week for one semester. Fulfills the basic Russian, East European, and Eurasian studies requirement in language, literature, and culture. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 9: The Russian Novel.** Same as Comparative Literature 323 (Topic 29) and Core Texts and Ideas 345 (Topic 6). A survey of classic Russian authors as well as experimental works from the nineteenth through the twenty-first century. Only one of the following may be counted: Comparative Literature 323 (Topic: The Russian Novel), 323 (Topic 29), Core Texts and Ideas 345 (Topic: The Russian Novel), 345 (Topic 6), English 322 (Topic 37), European Studies 347 (Topic 22), Russian 356 (Topic 1), Russian, East European, and Eurasian Studies 325 (Topic 9). Additional prerequisite: Upper-division standing. **Topic 10: The Major Works of Dostoevsky.** Same as Comparative Literature 323 (Topic 30) and Core Texts and Ideas 345 (Topic 5). Explores the dilemmas of homicide, suicide, patricide, and redemption in the novels of Fyodor Dostoevsky. Only one of the following may be counted: Comparative Literature 323 (Topic: The Major Works of Dostoevsky), 323 (Topic 30), Core Texts and Ideas 345 (Topic: Major Works of Dostoevsky), 345 (Topic 5), European Studies 347 (Topic: Major Works of Dostoevsky), 347 (Topic 10), Russian 360 (Topic: Major Works of Dostoevsky), 360 (Topic 1), Russian, East European and Eurasian Studies 325 (Topic: Major Works of Dostoevsky), 325 (Topic 10). Additional prerequisite: Upper-division standing. **Topic 11: Contemporary Russian Cinema**. Uses contemporary Russian film both as a means of exploring the confusion that resulted from the demise of the Soviet Union in 1991 and the search for a new sense of identity in Russia throughout the 1990s and early 2000s. Only one of the following may be counted: Russian 326 (Topic 4), 330 (Topic: Contemporary Russian Cinema), 330 (Topic 4), Russian, East European, and Eurasian Studies 325 (Topic 11). Additional prerequisite: Upper-division standing.

**Topic 12: Visions of the Apocalypse in Russian Literature and Culture.** Same as Comparative Literature 323 (Topic 25). Explores and analyzes apocalyptic consciousness in Russian literature and culture from the Middle Ages to the present. Emphasis will be on such themes as the expectation of the end of the world, identification of the Antichrist, messianic prophecy, and visions of an afterlife. Only one of the following may be counted: Comparative Literature 323 (Topic: The Apocalypse in Russian Literature and Culture), 323 (Topic 25), Russian 330 (Topic 5), Russian, East European, and Eurasian Studies 325 (Topic: The Apocalypse in Russian Literature and Culture), 325 (Topic 12). Prerequisite: Upper-division standing.

**Topic 13: Medieval Russian Literature and Culture.** Medieval and early modern Russian literature and culture, including literary texts from Kievan and Muscovite Russia. Only one of the following may be counted: Comparative Literature 323 (Topic: The Icon and the Sword: An Introduction to Old Russian Literature and Culture), Russian, East European, and Eurasian Studies 325 (Topic: The Icon and the Sword: An Introduction to Old Russian Literature and Culture), 325 (Topic 13), Russian 330 (Topic: The Icon and the Sword: An Introduction to Old Russian Literature and Culture), 330 (Topic 6). Additional prerequisite: Upper-division standing.

**Topic 14: Twentieth-Century Russian Culture.** Same as Comparative Literature 323 (Topic 22) and Humanities 350 (Topic 12). Survey of the political, social, and cultural history of Russia during the Soviet period, from the revolutionary events of 1917 until the dissolution of the Soviet government and political system in December 1991. Only one of the following may be counted: Comparative Literature 323 (Topic: Twentieth-Century Russian Culture), 323 (Topic 22), Humanities 350 (Topic: Twentieth-Century Russian Culture), 350 (Topic 12), Russian 330 (Topic: Twentieth-Century Russian Culture), 330 (Topic 7), Russian, East European, and Eurasian Studies 325 (Topic: Twentieth-Century Russian Culture), 325 (Topic 14). Additional prerequisite: Upper-division standing.

Topic 15: Slavs in the Western Imagination. Same as Comparative Literature 323 (Topic 28) and European Studies 347 (Topic 11). Examines representations of Eastern, Western, and Southern Slavs in Western Europe and North America. Only one of the following may be counted: Comparative Literature 323 (Topic: Slavs in the Western Imagination), 323 (Topic 28), European Studies 347 (Topic: Slavs in the Western Imagination), 347 (Topic 11), Russian, East European, and Eurasian Studies 325 (Topic: Slavs in the Western Imagination), 325 (Topic 15), Slavic 324 (Topic: Slavs in the Western Imagination), 324 (Topic 4). Additional prerequisite: Upper-division standing. Topic 16: The Major Works of Tolstoy. Same as Comparative Literature 323 (Topic 27). Explores Russian writer Lev Nikolaevich Tolstov. particularly his progression from idealizing family life and the Russian state to renouncing sexual love and national allegiances. Only one of the following may be counted: Comparative Literature 323 (Topic: The Major Works of Tolstoy), 323 (Topic 27), Russian 360 (Topic: Majors Works of Tolstoy), 360 (Topic 2), Russian, East European, and

Eurasian Studies 325 (Topic: The Major Works of Tolstoy), 325 (Topic 16). Additional prerequisite: Upper-division standing.

**Topic 18: War and Revolution in Russian Literature and Culture**. Same as Comparative Literature 323 (Topic 31) and Core Texts and Ideas 345 (Topic 8). Examines Russian narratives of war and revolution as represented in fiction, cinema, and journalism. Only one of the following may be counted: Comparative Literature 323 (Topic 31), Core Texts and Ideas 345 (Topic: War and Peace in Russian Literature and Culture), 323 (Topic 31), Core Texts and Ideas 345 (Topic 8), Russian 356 (Topic: War and Peace in Russian Literature and Culture), 345 (Topic 8), Russian 356 (Topic: War and Peace in Russian Literature and Culture), 356 (Topic 3), Russian, East European, and Eurasian Studies 325 (Topic 18). Additional prerequisite: Upper-division standing.

**Topic 19: Russian Youth Culture, Late Soviet to Present**. Examines the history and cultural products (films, music, writings) of Russia's youth, and their impact on contemporary society and politics. Only one of the following may be counted: Russian, East European, and Eurasian Studies 325 (Topic: Russian Youth Culture, Gorbachev to Present), 325 (Topic 19), Russian 330 (Topic: Russian Youth Culture, Gorbachev to Present), 330 (Topic 8). Additional prerequisite: Upper-division standing.

**Topic 21: Russia and Its World.** Same as Comparative Literature 323 (Topic 21) and Humanities 350 (Topic 11). Survey of the political, cultural, and social history of Russia, from its prehistoric origins to the installation of communist rule in 1917. Emphasis on the arts and on enduring themes of cultural identity, imagination, and conflict with neighboring peoples and within Russia. Only one of the following may be counted: Comparative Literature 323 (Topic: Russia and Its World), 323 (Topic 21), Humanities 350 (Topic: Russia and Its World), 320 (Topic 11), Russian 330 (Topic: Russia and Its World), 330 (Topic 11), Russian, East European, and Eurasian Studies 325 (Topic: Russia and Its World), 325 (Topic 21). Additional prerequisite: Upper-division standing.

**Topic 22: Russian Myths and Folktales.** Same as Anthropology 325L (Topic 12) and Comparative Literature 323 (Topic 34). Examination of the Russian folktale, its roots in ancient, pre-Christian Slavic religious tradition, its connections with other forms of folklore such as myth and legend, and its transformation in modern Russian literature. Subjects include the continuing influence of folklore explored through various aspects of Russian culture, including literature, music, ballet, film, and popular culture. Only one of the following may be counted: Anthropology 325L (Topic: Russian Myths and Folk Tales), 325L (Topic 12), Comparative Literature 323 (Topic: Russian Myths and Folk Tales), 330 (Topic 34), Russian 330 (Topic: Russian Myths and Folk Tales), 330 (Topic 9), Russian, East European and Eurasian Studies 325 (Topic: Russian Myths and Folk Tales), 325 (Topic: Russian Myths and Folk Tales), 325 (Topic: Puesian Myths and Folk Tales), 325 (Topic: Russian Myths and Folk Tales), 325 (Topic 22). Additional prerequisite: Upper-division standing.

**Topic 24: Rebels and Revolutionaries in Russian History and Literature.** Same as Comparative Literature 323 (Topic 20) and History 362G (Topic 15). Study of fictional and real rebels and revolutionaries across almost a century of Russian literature. Only one of the following may be counted: Comparative Literature 323 (Topic: Rebels and Revolutionaries in Russian History and Literature), 323 (Topic 20), History 362G (Topic: Rebels and Revolutionaries in Russian History and Literature), 362G (Topic 15), Russian 356 (Topic: Rebels and Revolutionaries in Russian History and Literature), 356 (Topic 4), Russian, East European, and Eurasian Studies 325 (Topic: Rebels and Revolutionaries in Russian History and Literature), 325 (Topic 24). Additional prerequisite: Upper-division standing.

Topic 25: Literature and Art of Russian Modernism and Avant-Garde. Focusing on literary and artistic expressions of Russian modernist and avant-garde esthetics, this course explores various responses to Russian cultural modernity between 1890s, when Russian Symbolists first published their works, and the Party decree of 1932 that established the Writers' Union and outlawed all other literary organizations. Only one of the following may be counted: Russian 330 (Topic: Literature and Art of Russian Modernism and Avant-Garde), 330 (Topic 10), Russian, East European and Eurasian Studies 325 (Topic: Literature and Art of Russian Modernism and Avant-Garde), 325 (Topic 25). Additional prerequisite: Upper-division standing.

**Topic 29: Bulgakov's Master and Margarita.** Same as Comparative Literature 323 (Topic 8). Explores the novel in the context of other literary works by Bulgakov and its varied sources in world literature, music, and the visual arts. Only one of the following may be counted: Comparative Literature 323 (Topic: Bulgakov's Master and Margarita), 323 (Topic 8), Russian 360 (Topic: Bulgakov's Master and Margarita), 360 (Topic 3), Russian, East European, and Eurasian Studies 325 (Topic: Bulgakov's Master and Margarita), 325 (Topic 29). Additional prerequisite: Upper-division standing.

**Topic 31: Chechnya: the Politics, Power, and People**. History, culture, religions, and recent upheaval of the region of the northern Caucasus called Chechnya. Only one of the following may be counted: Russian, East European, and Eurasian Studies 325 (Topic 31), 345 (Topic: Chechnya: the Politics, Power, and People), 345 (Topic 5), Slavic 324 (Topic: Chechnya: the Politics, Power, and People), 324 (Topic 3). Additional prerequisite: Upper-division standing.

# REE 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Russian, East European, and Eurasian Studies.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Center for Russian, East European, and Eurasian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

# REE 335. Topics in History, Economics, and Government.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Marxist Economics.** An introduction to the Marxian economic theory of capitalism through the study of Karl Marx's Capital, volume I, and of its contemporary relevance. Economics 357K and Russian, East European, and Eurasian Studies 335 (Topic 1) may not both be counted. Prerequisite: Upper-division standing, and Economics 304K and 304L with a grade of at least C in each; or consent of instructor. **Topic 2: Governments and Politics of Eastern Europe.** Same as Government 324J and European Studies 348 (Topic 1: Governments and Politics of Eastern Europe. Same as Studies 348 (Topic 1), Government 324J, Russian, East European, and Eurasian Studies 335 (Topic 2). Additional prerequisite: Six semester hours of lower-division coursework in government.

Topic 3: Governments and Politics of Russia. Issues of nationalism and state-building facing Russia and its neighbors. Evaluation of the post-Soviet experience from the perspectives of both domestic and foreign policy. Government 336M and Russian, East European, and Eurasian Studies 335 (Topic 3) may not both be counted. Prerequisite: Six semester hours of lower-division coursework in government. Topic 5: History of Russia to 1917. Same as History 343L. Survey of Russian history from seventeenth-century Muscovy to the fall of the Romanovs in 1917. Prerequisite: Upper-division standing. Topic 6: History of Russia since 1917. Same as History 343M. A survey of Russian history from the revolution of 1917 to the collapse of the Soviet Union. Prerequisite: Upper-division standing. **Topic 10: The Military in Politics.** Only one of the following may be counted: Government 365N (Topic 3); Latin American Studies 337M (Topic 9); Russian, East European, and Eurasian Studies 335 (Topic 10). Prerequisite: Six semester hours of lower-division coursework in government.

Topic 11: Germany in the Twentieth Century. Same as History 337N.
Survey of German political and military institutions, economic development, culture, and society. History 337N and Russian, East European, and Eurasian Studies 335 (Topic 11) may not both be counted. Additional prerequisite: Upper-division standing.
Topic 12: Stalinist Russia. Same as History 350L (Topic 41). History 350L (Topic 41) and Russian, East European, and Eurasian Studies 335 (Topic 12) may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 13: Russian Economic Development since 1917.** The growth of the planned economy in industry, agriculture, and labor. Economics 346K and Russian, East European, and Eurasian Studies 335 (Topic 13) may not both be counted. Prerequisite: Economics 304K and 304L with a grade of at least C in each, and six additional semester hours of coursework in social science; or consent of instructor.

**Topic 14: Political Economy of International Crises.** Examines several dimensions of the ongoing crises in the world economic order and the interrelationships among them. Problem areas covered are neoliberalism, international money, debt, famine, immigration, and energy shocks. Economics 357L and Russian, East European, and Eurasian Studies 335 (Topic 14) may not both be counted. Prerequisite: Economics 304K and 304L with a grade of at least C in each, and six additional semester hours of coursework in social science.

**Topic 15: Understanding the Cold War.** Same as Government 360N (Topic 4: Understanding the Cold War). Additional prerequisite: Upperdivision standing and six semester hours of lower-division coursework in government.

**Topic 16: Eastern Europe in the Twentieth Century.** Same as European Studies 346 (Topic 16) and History 362G (Topic 7). Examines the major political, social, and cultural events that shaped Eastern European society in the twentieth century. Only one of the following may be counted: European Studies 346 (Topic: Eastern Europe in the 20th-Century), 346 (Topic 16), History 362G (Topic: Eastern Europe in the 20th-Century), 362G (Topic 7), Russian, East European, and Eurasian Studies 335 (Topic: Eastern Europe in the 20th-Century), 335 (Topic 16).

**Topic 17: Introduction to the Holocaust.** Same as European Studies 346 (Topic 17), History 362G (Topic 3), and Jewish Studies 364 (Topic 6). Examines the mass killing of Jews and other victims in the context of Nazi Germany's quest for race and space during World War II. Only one of the following may be counted: European Studies 346 (Topic: Introduction to the Holocaust), 346 (Topic 17), History 362G (Topic: Introduction to the Holocaust), 362G (Topic 3), Jewish Studies 364 (Topic: Introduction to the Holocaust), 364 (Topic 6), Middle Eastern Studies 325 (Topic: Introduction to the Holocaust), 364 (Topic 17), Russian, East European, and Eurasian Studies 335 (Topic: Introduction to the Holocaust), 335 (Topic 17).

**Topic 18: Southeast Europe in the Twentieth Century.** Same as European Studies 346 (Topic 18), History 362G (Topic 9), and Jewish Studies 364 (Topic 8). Explores the key events and developments of Southeastern Europe, the region commonly referred to as the Balkans, in the twentieth century. Only one of the following may be counted: European Studies 346 (Topic: Southeast Europe in the Twentieth Century), 346 (Topic 18), History 362G (Topic: Southeast Europe in the Twentieth Century), 362G (Topic 9), Jewish Studies 364 (Topic: Southeast Europe in the Twentieth Century), 364 (Topic 8), Russian, East European, and Eurasian Studies 335 (Topic: Southeast Europe in the Twentieth Century), 335 (Topic 18). **Topic 19: World War II in Eastern Europe.** Same as European Studies 346 (Topic 12), History 350L (Topic 79), and Jewish Studies 364 (Topic 11). Examines the war in Eastern Europe with a particular emphasis on occupation, collaboration, and resistance; the Holocaust; and the connection between ethnic cleansing, population transfer, and the establishment of communism in postwar Eastern Europe. Only one of the following may be counted: European Studies 346 (Topic: World War II in Eastern Europe), 346 (Topic 12), History 350L (Topic: World War II in Eastern Europe), History 350L (Topic 79), Jewish Studies 364 (Topic: World War II in Eastern Europe), 364 (Topic 11), Russian, East European, and Eurasian Studies 335 (Topic: World War II in Eastern Europe), 335 (Topic 19).

**Topic 20: German Nationalisms.** Same as European Studies 346 (Topic 22), Government 365N (Topic 19), and German, Scandinavian, and Dutch Studies 361K. History of diverse views and movements regarding German national identity within their respective contexts, 1800-present. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic: German Nationalisms), 346 (Topic 22), German, Scandinavian, and Dutch Studies 361K, Germanic Civilization 360E (Topic 3), Government 365N (Topic 6), 365N (Topic 19), Russian, East European and Eurasian Studies 335 (Topic: German Nationalisms), 335 (Topic 20). Additional prerequisite: Upper-division standing.

**Topic 21: Causes of War.** Same as Government 360N (Topic 2). Only one of the following may be counted: Government 360N (Topic 2), Russian, East European, and Eurasian Studies 335 (Topic: Causes of War), 335 (Topic 21).

**Topic 22: Politics of New Democracies.** Same as Government 365N (Topic 13) and Latin American Studies 337M (Topic 15). Examination of the process of democratization and factors related to its success. Only one of the following may be counted: Government 365N (Topic 13), Latin American Studies 337M (Topic: Politics of New Democracies), 337M (Topic 15), Russian, East European, and Eurasian Studies 335 (Topic: Politics of New Democracies), 335 (Topic 22). Additional prerequisite: For government majors, six semester hours of lower-division coursework in government; for others, upper-division standing.

**Topic 23: Jews of Eastern Europe.** Same as History 362G (Topic 8), Jewish Studies 364 (Topic 7), and Religious Studies 357 (Topic 13). Explores the history and culture of Jews in Eastern Europe. Only one of the following may be counted: History 362G (Topic: Jews of Eastern Europe), 362G (Topic 8), Jewish Studies 364 (Topic: Jews of Eastern Europe), 364 (Topic 7), Religious Studies 357 (Topic: Jews of Eastern Europe), 357 (Topic 13), Russian, East European, and Eurasian Studies 335 (Topic: Jews of Eastern Europe), 335 (Topic 23).

# REE 345. Topics in Sociology, Geography, and Anthropology.

Three lecture hours a week for one semester. Fulfills the basic Russian, East European, and Eurasian studies requirement in sociology, geography, and anthropology. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 2: Regions and Cultures of Europe.** Same as European Studies 346 (Topic 19) and Geography 326. Spatial patterns in Europe, with emphasis on cultural, historical, and political geography. Only one of the following may be counted: European Studies 346 (Topic: Regions and Cultures of Europe), 346 (Topic 19), Geography 326, Russian, East European, and Eurasian Studies 345 (Topic 2). Additional prerequisite: Upper-division standing.

**Topic 4: Geography of the Former Soviet Union.** Same as Geography 327. A systematic introduction to cultural, physical, political, and economic geography of the former Soviet Union. Focus on the fundamental transformation that the former Socialist Union Republics,

now sovereign states, have undergone since 1991. Prerequisite: Upper-division standing.

**Topic 6: Northern Lands and Cultures.** Same as European Studies 346 (Topic 9) and Geography 356T (Topic 4). Develops geographical understanding of the Circumpolar region of the North, an ancient human habitat, home to distinct millennia-old civilizations. Only one of the following may be counted: European Studies 346 (Topic: Northern Lands and Cultures), 346 (Topic 9), Geography 356T (Topic: Northern Lands and Cultures), 356T (Topic 4), Russian, East European, and Eurasian Studies 345 (Topic: Northern Lands and Cultures), 345 (Topic: Orthern Lands and Cultures), 345 (Topic: Northern Lands and Cultures), 345 (Topic: Northern Lands and Cultures), 345 (Topic: Northern Lands and Cultures), 345 (Topic 6). Additional prerequisite: Upper-division standing.

Topic 7: Northern Gods, Northern Faiths: The Conversion of Scandinavians, Finns, Northern Slavs and Shamans. Same as German, Scandinavian, and Dutch Studies 361G and Religious Studies 357 (Topic 16). An introduction to the basic source texts for several pre-Christian belief systems evolving in geographic proximity and their influence on one another including pre-Christian Slavic; pre-Christian Scandinavian; pre-Christian Sami and Finnish; and ancient and modern Siberian shamanism, Only one of the following may be counted: German, Scandinavian, and Dutch Studies 361G, Religious Studies 357 (Topic 16), Russian, East European, and Eurasian Studies 345 (Topic 7). Additional prerequisite: Upper-division standing. Topic 8: Cultures and Ecologies. Same as Anthropology 325L (Topic 16). Examines the anthropology of "nature" and "natural resources," with particular attention to the communities in the arctic and subarctic regions. Use ethnographies to learn about the cultures of peoples who inhabit northern latitudes, especially their cosmological modes of belief and their ecological ways of life. Only one of the following may be counted: Anthropology 325L (Topic: Cultures and Ecologies), 325L (Topic 16), Russian, East European, and Eurasian Studies 345 (Topic: Cultures and Ecologies), 345 (Topic 8). Additional prerequisite: Upper-division standing.

**Topic 9: Geography of Religion in Eastern Europe and Russia**. Same as Geography 356T (Topic 14) and Religious Studies 357 (Topic 5). A comprehensive overview of major religious culture regions in the former Eastern bloc countries. Only one of the following may be counted: Geography 356T (Topic: Geography of Religion in Eastern Europe and Russia), 356T (Topic 14); Religious Studies 357 (Topic: Geography of Religion in Eastern Europe and Russia), 357 (Topic 5); Russian, East European, and Eurasian Studies 345 (Topic: Geography of Religion in Eastern Europe and Russia), 345 (Topic 9). Additional prerequisite: Upper-division standing.

# REE 358Q. Supervised Research.

Individual instruction. Prerequisite: Upper-division standing.

#### **REE 379C. Conference Course.**

Conference course. May be repeated for credit. Prerequisite: Consent of the undergraduate adviser in Russian, East European, and Eurasian studies.

# REE 679H. Honors Tutorial Course.

Intensive reading and research planned with and approved by the honors adviser, followed by completion of a thesis. Conference course for two semesters. Required of Russian, East European, and Eurasian studies majors who plan to seek special honors in Russian, East European, and Eurasian studies. Prerequisite: For 679HA, upper-division standing, admission to the Russian, East European, and Eurasian Studies Honors Program, and consent of the honors adviser; for 679HB, Russian, East European, and Eurasian Studies 679HA.

# Department of Slavic and Eurasian Studies

Before enrolling for the first time in any language offered by the Department of Slavic and Eurasian Studies, all students with any knowledge of the language, however acquired, must take a placement test to determine the course for which they should register. Information on placement tests for Polish and Russian is available from the Testing and Evaluation Services, 512-232-2662. Information about testing in other languages is available from the Department of Slavic and Eurasian Studies office, Calhoun Hall 415, 512-471-3607.

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

# Czech: CZ

# **Lower-Division Courses**

# CZ 601C. Intensive Czech I.

Not open to native or heritage speakers of Czech. Emphasis on developing oral proficiency in Czech using intensive methods of instruction. Six lecture hours a week for one semester. Only one of the following may be counted: Czech 601C, 406, 506. Only one of the following may be counted: Czech 601C, 407, 507.

# CZ 406, 506. First-Year Czech I.

Emphasis on four-skills proficiency: listening, speaking, reading, and writing. For each semester hour of credit earned, one lecture hour a week for one semester. Only one of the following may be counted: Czech 601C, 406, 506.

# CZ 407, 507. First-Year Czech II.

Emphasis on four-skills proficiency: listening, speaking, reading, and writing. For each semester hour of credit earned, one lecture hour a week for one semester. Only one of the following may be counted: Czech 601C, 407, 507. Prerequisite: Czech 406 or 506.

# CZ 611C. Intensive Czech II.

Not open to native or heritage speakers of Czech. Continuing intensive development of proficiency in Czech, with a focus on speaking and the reading of authentic texts. Six lecture hours a week for one semester. Czech 611C and 312K, 412K may not both be counted. Czech 611C and 312L, 412L may not both be counted. Prerequisite: Czech 601C or 507.

# CZ 312K, 412K. Second-Year Czech I.

Listening, speaking, reading, and writing at the second-year level. For each semester hour of credit earned, one lecture hour a week for one semester. Czech 611C and 312K, 412K may not both be counted. Prerequisite: Czech 601C or 507.

# CZ 312L, 412L. Second-Year Czech II.

Listening, speaking, reading, and writing at the advanced, second-year level. For each semester hour of credit earned, one lecture hour a week for one semester. Czech 611C and 312L, 412L may not both be counted. Prerequisite: Czech 312K or 412K.

# CZ 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Czech.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Slavic and Eurasian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

# **Upper-Division Courses**

# CZ 325. Third-Year Czech I.

Oral expression, reading, and composition. Three lecture hours a week for one semester. Prerequisite: Czech 611C or 312L.

# CZ 326. Third-Year Czech II.

Continuation of Czech 325: Oral expression, reading, and composition. Three lecture hours a week for one semester. Prerequisite: Czech 325.

# CZ 328. Topics in Advanced Czech.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Czech 312L or 412L; additional prerequisites vary with the topic.

# CZ 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Czech.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Slavic and Eurasian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

# CZ 379. Conference Course in Czech Language or Literature.

Three lecture hours a week for one semester. May be repeated for credit. Prerequisite: Six semester hours of upper-division coursework in Czech, or upper-division standing and consent of instructor.

# CZ 679H. Honors Tutorial Course.

Supervised individual research on a literary honors paper of some length. Conference course for two semesters. Must be taken for special honors in addition to the major requirement. Prerequisite: For 679HA, upperdivision standing, a University grade point average of at least 3.00, and a grade point average in Czech of at least 3.50; for 679HB, Czech 679HA.

# Polish: POL

# **Lower-Division Courses**

# POL 601C. Intensive Polish I.

Not open to native or heritage speakers of Polish. Emphasis on developing oral proficiency in Polish using intensive methods of instruction. Six lecture hours a week for one semester. Polish 601C and 506 may not both be counted. Polish 601C and 507 may not both be counted.

# POL 506. First-Year Polish I.

Emphasis on four-skills proficiency. Five lecture hours a week for one semester. Polish 601C and 506 may not both be counted.

# POL 507. First-Year Polish II.

Emphasis on four-skills proficiency. Five lecture hours a week for one semester. Polish 601C and 507 may not both be counted. Prerequisite: Polish 506.

# POL 611C. Intensive Polish II.

Not open to native or heritage speakers of Polish. Continuing intensive development of proficiency in Polish, with a focus on speaking and the reading of authentic texts. Six lecture hours a week for one semester. Polish 611C and 312K may not both be counted. Polish 611C and 312L may not both be counted. Prerequisite: Polish 601C or 507.

# POL 312K. Second-Year Polish I.

Emphasis on four-skills proficiency. Three lecture hours a week for one semester. Polish 611C and 312K may not both be counted. Prerequisite: Polish 601C or 507.

# POL 312L. Second-Year Polish II.

Emphasis on four-skills proficiency. Three lecture hours a week for one semester. Polish 611C and 312L may not both be counted. Prerequisite: Polish 312K.

# **Upper-Division Courses**

# POL 325. Third-Year Polish I.

Oral expression, reading, and composition. Three lecture hours a week for one semester. Polish 325 and Russian, East European, and Eurasian Studies 325 (Topic: Third-Year Polish I) may not both be counted. Prerequisite: Polish 611C or 312L.

# POL 326. Third-Year Polish II.

Continuation of Polish 325: Oral expression, reading, and composition. Three lecture hours a week for one semester. Polish 326 and Russian, East European, and Eurasian Studies 325 (Topic: Third-Year Polish II) may not both be counted. Prerequisite: Polish 325.

# POL 379. Conference Course in Polish Language or Literature.

Conference course. May be repeated for credit. Prerequisite: Six semester hours of upper-division coursework in Polish or consent of instructor.

# **Russian: RUS**

# **Lower-Division Courses**

# RUS 601C. Intensive Russian I.

Not open to native or heritage speakers of Russian. Emphasis on developing oral proficiency in Russian using intensive methods of instruction. Six lecture hours a week for one semester. May not be counted by students with credit for Russian 406, 506, 407, 507.

# RUS 406, 506. First-Year Russian I.

Emphasis on four-skills proficiency: listening, speaking, reading, and writing. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. Only one of the following may be counted: Russian 601C, 406, 506.

# RUS 407, 507. First-Year Russian II.

Emphasis on four-skills proficiency: listening, speaking, reading, and writing. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. Only one of the following may be counted: Russian 601C, 407, 507. Prerequisite: Russian 406 or 506.

# RUS 611C. Intensive Russian II.

Not open to native or heritage speakers of Russian. Continuing intensive development of proficiency in Russian, with a focus on speaking and the reading of authentic texts. Six lecture hours a week for one semester. Only one of the following may be counted: Russian 611C, 312L, 412L. Prerequisite: Russian 601C or 507.

# RUS 312K, 412K. Second-Year Russian I.

Listening, speaking, reading, and writing at the second-year level. Four lecture hours a week for one semester. Russian 611C and 412K may not both be counted. Prerequisite: Russian 601C or 507.

# RUS 312L, 412L. Second-Year Russian II.

Listening, speaking, reading, and writing at the advanced, second-year level. For 312L, three lecture hours a week for one semester; for 412L, four lecture hours a week for one semester. Only one of the following may be counted: Russian 611C, 312L, 412L. Prerequisite: Russian 312K or 412K.

# RUS 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Russian.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Slavic and Eurasian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

# **Upper-Division Courses**

# RUS 322C. Intermediate Russian Through Conversation.

Development of the basic skills of listening, speaking, reading, and writing, with special emphasis on oral communication. Three lecture hours a week for one semester. Russian 322C and 324 may not both be counted. Russian 322C and 325 may not both be counted. Prerequisite: Russian 611C or 312K, 412K.

# RUS 322W. Intermediate Russian Through Writing.

Development of the basic skills of listening, speaking, reading, and writing, with a special emphasis on written expression. Three lecture hours a week for one semester. Russian 322W and 324 may not both be counted. Russian 322W and 325 may not both be counted. Prerequisite: Russian 611C or 312K, 412K.

# RUS 324. Third-Year Russian I.

Oral expression, reading, and composition. Three lecture hours a week for one semester. Russian 322C and 324 may not both be counted. Russian 322W and 324 may not both be counted. Prerequisite: Russian 611C or 412L.

# RUS 325. Third-Year Russian II.

Oral expression, reading, and composition. Three lecture hours a week for one semester. Russian 322C and 325 may not both be counted. Russian 322W and 325 may not both be counted. Prerequisite: Russian 324.

# RUS 326. Topics in Advanced Russian.

Designed to enhance the student's skills in a variety of functional areas. Topics may include advanced oral communication, stylistics, Russian for business, literary translation of legal and business documents, scientific and technical translation. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Russian 325.

Topic 1: Vysotsky: His Life and Works. An overview of the songs, films, and stage performances of Russia's premiere singer/song writer, Vladimir Vysotsky. Focus on his use of language and the cultural context of the times. Russian 326 (Topic: Vysotsky: His Life and Works) and 326 (Topic 1) may not both be counted. Additional prerequisite: Upper-division standing and Russian 325. Topic 2: Russia at the Movies: 1936-1979. Development of listening, speaking, and reading in Russian, while addressing stylistic shifts in the spoken language. Material will be drawn from a series of popular films from early to late Soviet cinema. Russian 326 (Topic: Russia at the Movies) and 326 (Topic 2) may not both be counted.

**Topic 3: Russian Media, Business, and Public Policy.** Advanced writing and oral communication skills in the Russian language based on both tradition approach to grammatical and lexical studies of the language and innovative use of current Russian media, including newspaper and magazine articles, news programs, DVD clips, and short films. Development of ability to master both formal and informal knowledge of contemporary Russian and to discuss the most important issues of the Russian society. Russian 326 (Topic: Advanced Russian Composition and Conversation I) and 326 (Topic 3) may not both be counted.

**Topic 4: Russia at the Movies since 1980.** Development of listening, speaking, and reading in Russian, while addressing stylistic shifts in the spoken language. Material will be drawn from a series of popular films from the late Soviet period to contemporary Russian cinema. Only one of the following may be counted: Russian 326 (Topic 4), 330 (Topic: Contemporary Russian Cinema), 330 (Topic 4), Russian, East European, and Eurasian Studies 325 (Topic 11).

**Topic 5: The Russian Short Story.** Introduction to short works of Russian literature by Pushkin, Gogol, Turgenev, Leskov, Dostoevsky, Tolstoy, Chekhov, Babel, Bulgakov, Solzhenitsyn, Tolstaya, Pelevin, and others. All readings and discussions are in Russian. Only one of the following may be counted: Russian 326 (Topic 5), 329 (Topic: The Russian Short Story), and 329 (Topic 1).

# RUS 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Russian.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Slavic and Eurasian Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

# RUS 130D. Russian across Disciplines.

Read and discuss Russian language materials related to the subject matter of another designated course. One lecture hour a week for one semester. May be repeated for credit. Prerequisite: Russian 611C or 412L and consent of instructor.

# RUS 365T. The Art of Russian to English Translation.

Introduction to the art of translation from Russian to English and English to Russian. The focus is on translation of a variety of fiction and nonfiction texts, but instruction and practice in oral interpretation will also be available. Exposure to the variety of contemporary opportunities in the professional field of translation. Three lecture hours a week for one semester. Russian 365T and 369 (Topic: The Art of Russian-English Translation) may not both be counted. Prerequisite: Russian 325.

# RUS 369. Topics in Russian Linguistics.

Introduction to selected topics in the structure or history of Russian. Conducted in English. Three lecture hours a week for one semester. May not be used to fulfill the foreign language requirement for any bachelor's degree. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

# RUS 379. Conference Course in Russian Language or Literature.

Conference course. May be repeated for credit. Prerequisite: Six semester hours of upper-division coursework in Russian or consent of instructor and the chair of the department.

# RUS 679H. Honors Tutorial Course.

Supervised individual research on a literary or linguistic problem, which culminates in an honors paper of some length. Conference course for two semesters. Must be taken for special honors in addition to the major requirement. Prerequisite: For 679HA, upper-division standing, a University grade point average of at least 3.00, and a grade point average in Russian of at least 3.50; for 679HB, Russian 679HA.

# Serbian/Croatian: S C

# **Lower-Division Courses**

# S C 601C. Intensive Bosnian/Croatian/Serbian I.

Not open to native or heritage speakers of Bosnian/Croatian/Serbian. Emphasis on developing oral proficiency in Bosnian/Croatian/Serbian using intensive methods of instruction. Six lecture hours a week for one semester. Serbian/Croatian 601C and 506 may not both be counted. Serbian/Croatian 601C and 507 may not both be counted.

# S C 506. First-Year Bosnian/Croatian/Serbian I.

Emphasis on proficiency in four skills: listening, speaking, reading, and writing. Five lecture hours a week for one semester. Serbian/Croatian 601C and 506 may not both be counted.

# S C 507. First-Year Bosnian/Croatian/Serbian II.

Emphasis on proficiency in four skills: listening, speaking, reading, and writing. Five lecture hours a week for one semester. Serbian/Croatian 601C and 507 may not both be counted. Prerequisite: Serbian/Croatian 506.

# S C 611C. Intensive Bosnian/Croatian/Serbian II.

Not open to native or heritage speakers of Bosnian/Croatian/Serbian. Continuing intensive development of proficiency in Bosnian/Croatian/ Serbian, with a focus on speaking and the reading of authentic texts. Six lecture hours a week for one semester. Serbian/Croatian 611C and 312K may not both be counted. Serbian/Croatian 611C and 312L may not both be counted. Prerequisite: Serbian/Croatian 601C or 507.

# S C 312K. Second-Year Bosnian/Croatian/Serbian I.

Listening, speaking, reading, and writing at the second-year level. Three lecture hours a week for one semester. Serbian/Croatian 611C and 312K may not both be counted. Prerequisite: Serbian/Croatian 601C or 507.

# S C 312L. Second-Year Bosnian/Croatian/Serbian II.

Listening, speaking, reading, and writing at the advanced, second-year level. Three lecture hours a week for one semester. Serbian/Croatian 611C and 312L may not both be counted. Prerequisite: Serbian/Croatian 312K.

# **Upper-Division Courses**

# S C 324. Topics in Bosnian/Croatian/Serbian Studies.

Selected aspects of Bosnian/Croatian/Serbian history and culture. Conducted in English. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

# S C 325. Third-Year Bosnian/Croatian/Serbian I.

Oral expression, reading, and composition. Three lecture hours a week for one semester. Prerequisite: Serbian/Croatian 611C or 312L.

# S C 326. Third-Year Bosnian/Croatian/Serbian II.

Oral expression, reading, and composition. Three lecture hours a week for one semester. Prerequisite: Serbian/Croatian 325.

# S C 379. Conference Course in Bosnian/Croatian/Serbian.

Conference course. May be repeated for credit. Prerequisite: Serbian/ Croatian 312K and 312L and consent of instructor.

# Slavic: SLA

Lower-Division Courses Upper-Division Courses Slavic and Eurasian Languages: SEL

# **Lower-Division Courses**

# SEL 601C. Intensive Slavic and Eurasian Languages I.

Emphasis on basic communication skills in Slavic and Eurasian languages: listening, speaking, reading, and writing. Includes introduction to Slavic and Eurasian cultures. Six lecture hours a week for one semester. Slavic and Eurasian Languages 601C and 506 may not both be counted unless the languages vary. Slavic and Eurasian Languages 601C and 507 may not both be counted unless the languages vary. May be repeated for credit when the topics vary.

# SEL 506. First-Year Slavic and Eurasian Languages I.

Emphasis on four-skills proficiency: listening, speaking, reading, and writing. Five lecture hours a week for one semester. Slavic and Eurasian Studies 601C and 506 may not both be counted unless the languages vary. May be repeated for credit when the topics vary.

# SEL 507. First-Year Slavic and Eurasian Languages II.

Emphasis on four-skills proficiency: listening, speaking, reading, and writing. Five lecture hours a week for one semester. Slavic and Eurasian Languages 601C and 507 may not both be counted unless the languages vary. May be repeated for credit when the topics vary. Prerequisite: Slavic and Eurasian Languages 506 in the same language.

# SEL 611C. Intensive Slavic and Eurasian Languages II.

Continuing intensive development of communication abilities in Slavic and Eurasian languages with emphasis on the four basic skills: listening, speaking, reading, and writing. Includes an introduction to Slavic and Eurasian cultures. Six lecture hours a week for one semester. Slavic and Eurasian Languages 611C and 312K may not both be counted unless the languages vary. Slavic and Eurasian Languages 611C and 312L may not both be counted unless the languages vary. May be repeated for credit when the topics vary. Prerequisite: Slavic and Eurasian Languages 601C or 507 in the same language.

# SEL 312K. Second-Year Slavic and Eurasian Languages I.

Listening, speaking, reading, and writing at the second-year level. Three lecture hours a week for one semester. Slavic and Eurasian Studies 611C and 312K may not both be counted unless the languages vary. May be repeated for credit when the topics vary. Prerequisite: Slavic and Eurasian Languages 601C or 507 in the same language.

# SEL 312L. Second-Year Slavic and Eurasian Languages II.

Listening, speaking, reading, and writing at the advanced, secondyear level. Three lecture hours a week for one semester. Slavic and Eurasian Languages 611C and 312L may not both be counted unless the languages vary. May be repeated for credit when the topics vary. Prerequisite: Slavic and Eurasian Languages 312K in the same language.

# **Upper-Division Courses**

# SEL 330. Topics in Slavic and Eurasian Languages.

Intermediate or advanced language instruction in a range of individual Slavic and Eurasian languages. Slavic and Eurasian language texts in the original language, writing assignments, and conversation practice to improve language proficiency in all of these modes of communication. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Slavic and Eurasian Languages 611C or 412L; additional prerequisites vary with the topic.

# SEL 379. Conference Course in Slavic and Eurasian Languages.

Conference course. May be repeated for credit. Prerequisite: Written consent of instructor.

# **Department of Sociology**

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

# Sociology: SOC

# **Lower-Division Courses**

# SOC 302 (TCCN: SOCI 1301). Introduction to the Study of Society.

The nature of human societies, social processes, social interaction, and the sociological approach. Three lecture hours or two lecture hours and one discussion hour a week for one semester.

# SOC 302P. Physical Activity and Society.

Same as Health and Society 310P. Explores the way in which people are physically active in a social context - primarily in the United States. Examines how social forces influence physical activity including cultural, economic, historical, and demographic considerations. Examines physical activity on both the individual and population levels to better understand benefits and barriers to activity through the social context. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 302P, 304 (Topic: Physical Activity and Society), Health and Society 310P.

# SOC 304. Introductory Topics in Sociology.

A sociological perspective of contemporary social subjects. Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

# SOC 307C. American Families Past and Present.

Examines trends over time in specific aspects of family life, including marriage, cohabitation, mate selection, divorce, parenthood, family structure, and work-family balance. Study of the methods that sociologists and demographers use to study the family. Three lecture hours a week for one semester. Sociology 307C and 308 (Topic: American Families Past and Present) may not both be counted.

# SOC 307D. Capital Punishment in America.

Uses various historical, legal and social perspectives to examine the shifting rationales and nature of contemporary United States death penalty debates: public opinion; racial disparities and the historical legacy of lynching; United States Supreme Court decisions; the death

penalty's efficacy as a criminal punishment, its personal impacts, and contemporary problems with its current application. Three lecture hours a week for one semester. Sociology 307D and 308 (Topic: Capital Punishment in America) may not both be counted.

# SOC 307E. Contemporary United States Social Problems.

Examines contemporary social issues confronting the United States, using sociological concepts and perspectives to analyze the nation's most pressing social problems, ranging from social inequality to crime, terrorism and war, and environmental degradation. Three lecture hours a week for one semester. Sociology 307E and 308 (Topic: Contemporary United States Social Problems) may not both be counted.

# SOC 307F. Diversity in American Families.

Same as Women's and Gender Studies 301 (Topic 19). Examination of the diversity of American families and current debates on family life from a sociological perspective with an emphasis on how diverse family forms came to exist and what these changes mean for adults and children in contemporary society. Study of recent trends in several aspects of family life, including dating and courtship, cohabitation, marriage, divorce, parenthood, family structure, and work-family balance. Overview of theoretical perspectives on family life with a focus on gender, race/ ethnicity, and sexuality. Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 315 (Topic: Diversity in American Families), Sociology 307F, 308 (Topic: Diversity in American Families), Women's and Gender Studies 301 (Topic: Diversity in American Families), 301 (Topic 19).

# SOC 307G. Culture and Society in the United States.

Introduction to theoretical perspectives, methodological issues, and empirical work in the sociological study of culture. Examination of sociological accounts of the production, reproduction, and reception of culture, with an emphasis on a critical understanding of culture in relation to other sociological phenomena such as power, inequality, and identities. Three lecture hours a week for one semester. Sociology 307G and 308 (Topic: Culture and Society in the United States) may not both be counted.

# SOC 307J. Education and Society.

Further study of the ways that schooling shapes the opportunities available to children and youth, and how educational attainment influences the lives and well-being of adults. Subjects include historical development and organization of the American educational system; factors that shape achievement and learning; differential access to educational opportunities along race, class, and gender lines; and the effects of educational stratification. Three lecture hours a week for one semester. Sociology 307J and 308 (Topic: Education and Society) may not both be counted.

# SOC 307K. Fertility and Reproduction.

Same as Women's and Gender Studies 301 (Topic 20). Explores the when, why, how, and with whom Americans bear children, and how the United States compares to other developed and developing countries in the world. Subjects include infertility and its treatments, the ethics of surrogacy and international adoption, voluntary childlessness, the rapid rise of nonmarital childbearing in the United States and other countries, the politics of childbirth, the risks of maternal morbidity and mortality in developed and developing countries, and the declining populations and rapid aging of rich countries including Japan, Italy, and Spain where many women have stopped having children. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 307K, 308 (Topic: Fertility and Reproduction), Women's and Gender Studies 301 (Topic: Fertility and Reproduction), 301 (Topic 20).

# SOC 307L. Gender, Race, and Class in American Society.

Same as Women's and Gender Studies 301 (Topic 21). Use of the sociological perspective to analyze how the structure of American society, individual life, and group life chances are shaped by broader structures of privilege and disadvantage based on gender, race, and class. Examination of these in institutional arenas such as work, the family, education, health, the criminal justice system, sexuality, popular culture, and more. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 307L, 308 (Topic: Gender, Race, and Class in American Society), Women's and Gender Studies 301 (Topic: Gender, Race, and Class in American Society), 301 (Topic 21).

# SOC 307N. Sociology of Development.

Introduction to major concepts and theories in the sociology of development, with a focus on problems of inequality in wealth and wellbeing from a global, comparative, and historical perspective. Three lecture hours a week for one semester. Sociology 307N and 308 (Topic: Introduction to the Sociology of Development) may not both be counted.

# SOC 307P. Introduction to the Sociology of Health and Well-Being.

Examination of the social causes and context of illness, death, longevity, and health care today in the United States. Subjects include historical perspectives on health and mortality, social class, race/ethnicity, gender, religious involvement, marital status, family, age, and psychosocial factors. Emphasis on the tension between individualistic and public health perspectives on illness. Three lecture hours a week for one semester. Sociology 307P and 308 (Topic: Introduction to the Sociology of Health and Well-Being) may not both be counted.

# SOC 307Q. Environmental Inequality and Health.

Examines the social roots and impacts of environmental contamination and natural disasters, with particular focus on how environmental health inequalities are linked to race, class, gender, and nation, and how residents of areas prone to environmental risks respond to hazards. Three lecture hours a week for one semester. Sociology 304 (Topic: Environmental Inequality and Health) and Sociology 307Q may not both be counted.

# SOC 307S. Judaism and Christianity in Sociological Perspective.

Study of Christianity's historic roots in Judaism, the texts that Jews and Christians share, what Jews believe, how and why the two faiths diverged and evolved, how institutionalized Christianity addresses its Jewish origins, and the relationship between Jews and Christians throughout history. Focus on the social, historical, and intellectual contexts and forces which have shaped these processes up to the present day, as well as religious evolution of how systems and ways of thought and action change, why, and how Christians and Jews have dealt with such changes. Three lecture hours a week for one semester. Only one of the following may be counted: Core Texts and Ideas 304 (Topic: Judaism and Christianity in Sociological Perspective), Sociology 307S, 308 (Topic: Judaism and Christianity in Sociological Perspective), Western Civilization 303 (Topic: Judaism and Christianity in Sociological Perspective).

# SOC 307T. Punishment and Society.

Focus on society's responses to crime. Introduction to the sociology of punishment and the death penalty, the American model of criminal punishment, and contextualization of the United States system and critical analysis of penal systems in general. Special emphasis on the nature of penal control in contemporary America. Three lecture hours a week for one semester. Sociology 307T and 308 (Topic: Punishment and Society) may not both be counted.

# SOC 308 (TCCN: SOCI 1306). Topics in Introductory Sociology.

A review of contemporary social topics from a sociological perspective, with the instructor selecting one topic for emphasis. Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

# SOC 308D. Ethnicity and Gender: La Chicana.

Same as Mexican American Studies 311 and Women's and Gender Studies 301 (Topic 6). Three lecture hours a week for one semester. Only one of the following may be counted: Mexican American Studies 311, 319 (Topic 1), Sociology 308 (Topic: Ethnicity and Gender: La Chicana), 308D, Women's and Gender Studies 301 (Topic 6).

#### SOC 308E. Race, Ethnicity, and Gender in Demography.

Same as Women's and Gender Studies 301 (Topic 22). Introduction to the patterns, trends and debates on race, ethnicity, and gender in demography. Study of the social aspect of demography and the relationship of demographic phenomena relative to racial, ethnic, and gender populations. Specific areas will include the following: conceptual/ measurement issues; migration and population dynamics; health and morality; and family and fertility. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 308 (Topic: Race, Ethnicity, and Gender in Demography), 308E, Women's and Gender Studies 301 (Topic 22).

# SOC 308F. Religion and Gender in America.

Same as Women's and Gender Studies 301 (Topic 18). Examines the complex relationship between religious involvement and gender and sexuality in American society with a focus on the historic relationship between religious engagement and women's movements as well as more contemporary issues. Exploration of several major religious traditions in the United States today, including Evangelical Christianity, Catholicism, and Judaism. Examination of smaller religious groups and their attempt to confront the complex and contradictory relationship between gender roles and belief. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 308 (Topic: Religion and Gender in America), 308F, Women's and Gender Studies 301 (Topic 18).

# SOC 308G. The Rich and the Poor in America: Sociological Perspective.

Review of classical and contemporary theories of inequality and stratification; examination of recent ethnographic accounts of experiences of the rich and poor in United States society. Development of critical thinking about social class in contemporary society, and study of how one's own experiences are both the products and producers of larger stratification systems. Three lecture hours a week for one semester. Sociology 308 (Topic: Rich and Poor in America) and 308G may not both be counted.

# SOC 308J. Romantic Relationships and Family Formation.

Same as Women's and Gender Studies 301 (Topic 23). Examination of romantic relationships and family formation from a cultural framework. Subjects include: historical transformations of romance; socioeconomic perspectives on sexual relationships and family formation; the impact of demographic transitions on the emergence of cohabitation as a relationship form; the economics undergirding relationship decision making; common narratives, practices, and gender differences about entry into marriage in the West; and population-level implications of contemporary patterns. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 308 (Topic: Romantic Relationships and Family Formation), 308J, Women's and Gender Studies 301 (Topic 23).

# SOC 308K. Social Change and the Future.

Study of the effects of conflict on society, culture, technology, and economy practices through comparative analysis and historical dimension with a focus on institutions responsible for managing and handling conflict such as warfare and the military. Conflict-related issues include social institutions, gender identities and roles, economy, health issues, technological changes, collective memory, and culture. Three lecture hours a week for one semester. Sociology 308 (Topic: Social Change and the Future) and 308K may not both be counted.

# SOC 308L. Social Transformation of Love and Relationships.

Same as Middle Eastern Studies 310 (Topic 4). Examination of the social, psychological, and spiritual perspectives toward the ideas of love and intimacy; how love and intimacy interact with rapid social, economic, and cultural change; and how the subsequent change transformed the social world and the meaning of love. Subjects include the aspects of self and identity; differentiation in the context of love in the modern age; the family and the individual; the impact of industrialization on private lives and the public order; gender, communication, love; intercultural love and intimacy; and personal choice and arranged marriages. Three lecture hours a week for one semester. Only one of the following may be counted: Middle Eastern Studies 310 (Topic: Social Transformation of Love and Relationships), 310 (Topic 4), Sociology 308 (Topic: Social Transformation of Love and Relationships), 308L.

# SOC 308M. Sociology of Identity.

Examination of the ways that identities are socially produced and the study of how that social construction results in power and privilege for some groups at the expense of others. Three lecture hours a week for one semester. Sociology 308 (Topic: Sociology of Identity) and 308M may not both be counted.

# SOC 308N. Comparative Religion, Politics, and Culture.

Investigation of the relationship between religion and politics through the central concept of culture. Subjects include religion as a form of culture and its effect on political life, the impact of the local culture of a society on religion and politics, and how historical conditions affect the religion-culture-politics relationship. Three lecture hours a week for one semester. Sociology 308 (Topic: Comparative Religion, Politics, and Culture) and 308N may not both be counted.

# SOC 308S. Introduction to Health and Society.

Same as Health and Society 301. A broad, multidisciplinary overview that introduces students to the study of health and society. Three lecture hours a week for one semester. Only one of the following may be counted: Health and Society 301, Sociology 308 (Topic: Introduction to Health and Society), 308S.

# SOC 309. Chicanos in American Society.

Same as Mexican American Studies 310. Introduction to the study of American character and its bearing on the Chicano experience. Three lecture hours a week for one semester.

# SOC 309C. Creating the Sustainable Society.

Same as Geography 309C. Overview of sustainability as something human beings must strive to create in an era of global warming and ever greater social inequalities, both between and within countries. Three lecture hours a week for one semester. Only one of the following may be counted: Geography 302P (Topic: Creating Sustainable Societies), 309C, Sociology 304 (Topic: Creating Sustainable Societies), 309C.

# SOC 310S. Women's Reproductive Health for Nonscience Majors.

Same as Nursing 307 (Topic 1) and Women's and Gender Studies 301 (Topic 7). Overview of contemporary women's reproductive health

issues, with emphasis on historical, physiological, psychosocial, and cultural influences that affect the reproductive health of women during adolescence, the childbearing years, and midlife. Three lecture hours a week for one semester. Only one of the following may be counted: Nursing 307 (Topic 1), Sociology 308 (Topic 2), 310S, Women's and Gender Studies 301 (Topic 7). Prerequisite: One year of high school biology, or Biology 301L or 309D.

# SOC 311C. Social Determinants of Health.

Considers the social factors that influence health and longevity, including sex/gender, race and ethnicity, socioeconomic status, and social integration. Examines the link between social position and health patterns in the United States. Three lecture hours a week for one semester. Sociology 308 (Topic: Social Determinants of Health) and 311C may not both be counted.

# SOC 313K. Introduction to the Sociology of Religion.

Introduction to sociological methods in the study of religion. Three lecture hours a week for one semester. Only one of the following may be counted: Asian Studies 301M (Topic 5: Introduction to the Study of Religion), Religious Studies 310, Sociology 313K.

# SOC 317L. Introduction to Social Statistics.

Measures of central tendency and dispersion, the binomial and chisquare distributions, tests of hypotheses and parameter estimation, and simple correlation and regression. Three lecture hours and one laboratory hour a week for one semester. Required of all sociology majors.

# SOC 317M. Introduction to Social Research.

The logic of scientific research, general methods of data collection and analysis, and computer applications. Two lecture hours and two laboratory hours a week for one semester. Required of all sociology majors. May be repeated once for credit. To enroll for the second time, students must receive consent of the undergraduate adviser. Prerequisite: One of the following courses with a grade of at least C: Biology 318M, 328M, Economics 329, Educational Psychology 371, Geological Sciences 325K, 366M, Government 350K, Geography 368C, Mathematics 316, 358K, 378K, Mechanical Engineering 335, Petroleum and Geosystems Engineering 337, Psychology 418, 325K, Social Work 318, Sociology 317L, Statistics 309, 309H, 371G, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 304 (or Statistics and Scientific Computation 304), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), or 328M (or Statistics and Scientific Computation 328M).

# SOC 318 (TCCN: SOCI 2339). Juvenile Delinquency.

Environments in which juvenile delinquency develops; delinquent subcultures and peer groups; societal reactions in schools, courts, and other agencies. Three lecture hours a week for one semester.

# SOC 319. Introduction to Social Demography.

Social consequences of changes in fertility, mortality, migration, population growth and composition. Three lecture hours a week for one semester.

# SOC 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Sociology.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Sociology. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

# **Upper-Division Courses**

# SOC 320C. Cancerland.

Same as Health and Society 340 (Topic 6). Explores the social and cultural terrain of cancer research, treatment, and public policy in the United States. Three lecture hours a week for one semester. Only one of the following may be counted: Health and Society 340 (Topic 6), Sociology 320C, 321K (Topic: Cancerland). Prerequisite: Upper-division standing.

# SOC 320K. Political Sociology.

Same as Government 355P. A survey of approaches to the study of the state as a social structure; political power and power systems; ideology; political parties and elites. Three lecture hours a week for one semester. Only one of the following may be counted: Government 355M (Topic: Political Sociology), 355P, Sociology 320K. Prerequisite: Upper-division standing.

# SOC 321C. Consumption in Latin America.

Same as Latin American Studies 325 (Topic 5). Study of the role consumption plays in social, economic, and political relations in Latin America, as well as contesting ideas about this role. Three lecture hours a week for one semester. Only one of the following may be counted: Latin American Studies 325 (Topic: Consumption in Latin America), Latin American Studies 325 (Topic 5), Sociology 321C, Sociology 321K (Topic: Consumption in Latin America). Prerequisite: Upper-division standing.

# SOC 321D. Demography of Crime and Punishment.

Intensive seminar exploring data sources and conceptual and measurement issues surrounding the study of racial and ethnic differences in crime and punishment, with a particular focus on how the distinct neighborhood and school contexts in which different racial and ethnic groups participate explain variations in criminal outcomes. Special emphasis on the role of the criminal justice system in producing and eliminating disparities in criminal justice outcomes. Three lecture hours a week for one semester. Sociology 321D and 321K (Topic: Demography of Crime and Punishment) may not both be counted. Prerequisite: Upper-division standing.

# SOC 321E. Economy, Culture, and Society.

Introduction to sociological research and theories of culture and the economy, with a special focus on gift giving. Study of gift giving behaviors will explore the core issues of sociology: social organization and social structure, social norms, the relationship between individual and society, the nature of economic and noneconomic exchange, reciprocity, obligation, cultural meanings, and power, among others. Three lecture hours a week for one semester. Sociology 321E and 321K (Topic: Economy, Culture, and Society) may not both be counted. Prerequisite: Upper-division standing.

# SOC 321F. Fundraising and Philanthropy.

Introduction to theories of the nonprofit sector and individual pro-social motivations and behavior, while also covering basic principles and techniques of fundraising. Receive practical instruction from fundraising professionals in the local nonprofit community on all aspects of a successful fundraising operation, from building a solid base of annual contributors to cultivating relationships with major gift prospects. Attention will be given to behind-the-scenes activities required to have a successful development program, including appropriate donor stewardship, prospect research, database maintenance, and donor analytics. Three lecture hours a week for one semester. Sociology 321F

and 321K (Topic: Effective Philanthropy) may not both be counted. Prerequisite: Upper-division standing.

# SOC 321G. Global Health Issues and Health Systems.

Overview of current global health challenges and issues from biological, cultural, and environmental perspectives. Examination, comparison, and contrasting of various health systems in the six World Health Organization geographic regions and countries within those regions, with regard to the specific health challenges they face. Three lecture hours a week for one semester. Sociology 321G and 321K (Topic: Global Health Issues and Health Systems) may not both be counted. Prerequisite: Upper-division standing.

# SOC 321K. Contemporary Issues in Sociology: Special Topics.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 10: Gender, Work, and the Labor Force.** Critical issues pertaining to workplaces and labor markets in industrial societies. Includes gender inequality in the labor market, social organization of work, types of work and employment, and changes in the labor force in industrial societies. Uses examples from East Asian countries to illustrate how the institutional context shapes women's employment behavior and economic conditions. Only one of the following may be counted: Asian Studies 361 (Topic: Work and Labor Markets), Sociology 321K (Topic 10), 321K (Topic: Work and Labor Markets). Prerequisite: Upper-division standing.

# SOC 321L. Sociology of Education.

Same as African and African Diaspora Studies 321L and Women's and Gender Studies 345 (Topic 23: Sociology of Education). Education as a societal institution, with emphasis on the United States educational system: how the system works; the effects of the system; recent changes. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

# SOC 321P. Politics and Society in Latin America.

Same as Latin American Studies 325 (Topic 4). Introduction to present-day Latin American politics and society with a focus on drugtrafficking and urban destitution in Brazil; party politics, protest, and collective violence in Argentina; the current political situation in Venezuela; and migration from Central America and the Caribbean to the United States. Also includes a general overview of revolutions and revolutionary movements in Latin America, and the effects of United States intervention in the region during the twentieth century. Three lecture hours a week for one semester. Only one of the following may be counted: Latin American Studies 325 (Topic: Politics and Society in Latin America), Latin American Studies 325 (Topic 4), Sociology 321K (Topic: Politics and Society in Latin America), Sociology 321P. Prerequisite: Upper-division standing.

# SOC 321Q. Social Inequality.

Study of social inequality as the unequal distribution of scarce but commonly desired resources and the processes by which these resources are allocated to individuals and groups. Examination of income and wealth inequality, occupational and class hierarchies, inequality of educational opportunity, poverty, social mobility between and within generations, gender and racial/ethnic inequality, and the consequences of inequality. Overview of the concepts, theories, facts, and methods of analysis used by sociologists to understand the social production and reproduction of inequality. Three lecture hours a week for one semester. Sociology 321K (Topic: Social Inequality) and 321Q may not both be counted. Prerequisite: Upper-division standing.

### SOC 321R. The Sociology of Race and Work.

Same as Asian American Studies 330 (Topic 4) and Women's and Gender Studies 322 (Topic 6). Critical examination of work in the United States over the twentieth and twenty-first centuries through a gendered, Asian American lens, using a comparative race perspective. Subjects include the sociological examination of concepts such as labor markets, globalization, care work, and gender/racial segregation in the workplace along with the ways race and gender shape how and where individuals are fitted into the workplace, how skills are evaluated, and how labor markets emerge. Three lecture hours a week for one semester. Only one of the following may be counted: Asian American Studies 330 (Topic: Sociology of Race and Work), 330 (Topic 4), Sociology 321K (Topic: Sociology of Race and Work), 321R, Women's and Gender Studies 322 (Topic: Sociology of Race and Work), 322 (Topic 6). Prerequisite: Upperdivision standing.

### SOC 321S. Anti-Semitism.

Same as History 366N (Topic 15) and Jewish Studies 365 (Topic 13). Surveys trends in Judeophobia/anti-Semitism over 2,500 years in both Christian and non-Christian societies. Designed to use anti-Semitism as way to explore more general ideas in social theory such as boundary making; models of racial, ethnic, and cultural conflict; and the role of intellectual and scientific elites. Three lecture hours a week for one semester. Only one of the following may be counted: History 366N (Topic: Anti-Semitism), 366N (Topic 15), Jewish Studies 365 (Topic: Anti-Semitism), 365 (Topic 13), Sociology 321K (Topic: Anti-Semitism), 321S. Prerequisite: Upper-division standing.

### SOC 321T. Sociology of Africa.

An introduction to the sociological study of sub-Saharan Africa. Major themes include: sources of knowledge about Africa; characteristics of African states and societies, from origin to internal social boundaries (religion, ethnicity, class); kinship and family; and development and change. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374C (Topic: Sociology of Africa), Sociology 321K (Topic: Sociology of Africa), 321T. Prerequisite: Upper-division standing.

### SOC 321U. Urban Sociology.

Same as Urban Studies 354 (Topic 11). Introduction to the study of the city and the suburbs. Specific focus on inequality in urban space, with emphasis on three major United States cities (New York, Chicago, and Los Angeles) and on several third world cities. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 321K (Topic: Urban Sociology), 321U, Urban Studies 354 (Topic: Urban Sociology), 354 (Topic 11). Prerequisite: Upper-division standing.

### SOC 321V. Environmental Sociology.

Investigation of the ways human social patterns and ideologies shape the environment, how the environment shapes human lives, and the ways humans and the natural environment interrelate. The city of Austin will be used as a case study to examine the relationship between the natural and built environments (city space). Special emphasis on the process of global warming and its effects on human society and these relationships. Three lecture hours a week for one semester. Sociology 321K (Topic: Environmental Sociology) and 321V may not both be counted. Prerequisite: Upper-division standing.

### SOC 322C. Sociology of Creativity.

Introduction to varying aspects of creative insights, human consciousness, social processes, and the 'invention of reality'. Use of the elements of mindfulness, intuition, and creativity at individual, organizational, societal, and environmental levels, drawing on lectures, group discussions, books, articles, artistic films, and documentaries in order to better understand and appreciate the interconnectedness and interrelationship between 'inner' (personal) reality and 'other' (social) reality. Three lecture hours a week for one semester. Sociology 321K (Topic: Sociology of Creativity) and 322C may not both be counted. Prerequisite: Upper-division standing.

### SOC 322D. Race and the Digital.

Same as African and African Diaspora Studies 322D and Women's and Gender Studies 322 (Topic 7). Review of theoretical developments in the sociological study of "race," including an examination of processes of racialization and cultural texts, in order to better understand the ways in which identities are socially produced. Attention will be placed on forms of popular culture, black cultural production, and political action to question how such practices are shaped by migrations within the African diaspora. Only one of the following may be counted: African and African Diaspora Studies 322D, 374E (Topic: Race, Culture, and Migration), Sociology 321K (Topic: Race, Culture, and Migration), 322D, Women's and Gender Studies 322 (Topic: Race, Culture, and Migration), 322 (Topic 7). Prerequisite: Upper-division standing.

### SOC 322F. Mental Health in Social Context.

Examines the social causes of mental health in the areas of social epidemiology of mental health; social and psychological factors in mental health; and treatment for psychological problems. Explores definitions of mental health and mental illness, and how they are measured. Contrasts the social view with the medical, psychiatric, and psychological views and explores social psychological factors in mental health, including perceived control over life, mastery, fatalism, social support, meaning, self-esteem, coping, trust, inequity, commitment, and flexibility. Three lecture hours a week for one semester. Sociology 321K (Topic: Mental Health in Social Context) and 322F may not both be counted. Prerequisite: Upper-division standing.

### SOC 322G. Politics, Power, and Society.

Explores the nature and dynamics of political life through classical works in political philosophy, contemporary sociological essays, fiction, and film. Discussion of the relationship between individual rights and state authority; what it means to belong to a group; the nature and dimensions of power and freedom; whether violence is compatible with democracy; and how and when revolutions take place. Three lecture hours a week for one semester. Sociology 321K (Topic: Politics, Power, and Society) and 322G may not both be counted. Prerequisite: Upper-division standing.

### SOC 322J. Economic Sociology of Health.

Same as Health and Society 340 (Topic 8). Provides a look at the economics of health and health care through a sociological lens. Examines how the multidimensional nature and distribution of health and healthcare are shaped by a variety of social and economic factors. Gain an understanding of the power of incentives, markets, and costbenefit analysis, as well as the limits of these tools, in creating effective health care policy. Three lecture hours a week for one semester. Only one of the following may be counted: Health and Society 340 (Topic 8), Sociology 321K (Topic: Economic Sociology of Health), 322J. Prerequisite: Upper-division standing

### SOC 322M. Sociology of Masculinities.

Same as Women's and Gender Studies 322 (Topic 3). Sociological examination of the most important debates and discussions about men's experiences of masculinity in contemporary patriarchal societies. Exploration of social and individual meanings of masculinity, the dominant paradigms of masculinity that are taken as the norm, and the problems, contradictions, and paradoxes men experience in modern society. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 321K (Topic: Sociology of Masculinities), 322M, Women's and Gender Studies 322 (Topic: Sociology of Masculinities), 322 (Topic 3). Prerequisite: Upper-division standing, three hours of coursework in sociology, and three hours of coursework in women's and gender studies.

### SOC 322P. Sex and Violence in Popular Culture.

Same as Women's and Gender Studies 322 (Topic 10). Overview of the cultural framing of sex and violence through realistic and hyperrealistic representations of sex, love, violence, and war in popular culture. Examination of the ethical implications, including the ways in which these representations rely on and further social inequalities and the sociological concepts, methods, and theoretical approaches to understanding sex and violence in popular culture. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 321K (Topic: Sex and Violence in Popular Culture), 322P, Women's and Gender Studies 322 (Topic 10), 345 (Topic: Sex and Violence in Popular Culture). Prerequisite: Upper-division standing.

### SOC 322R. Race, Sport, and Identity.

Same as African and African Diaspora Studies 374D (Topic 5). Explores the sociological significance of sport in relation to the construction of racialized identities. Focuses primarily but not exclusively on the black experience in sport, and examines the changing meanings given to sport throughout the twentieth century. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374 (Topic: Race, Sport, and Identity), 374D (Topic 5), Sociology 322R. Prerequisite: Upper-division standing.

### SOC 322S. The Sociology of Sport.

Examines the place of sport within social theory, with particular emphasis on the understanding of sport and society found in functionalist, Weberian, Marxist, figurational, feminist, and postmodernist accounts. This theoretical framework is used to explore key social issues in sport, including gender and representation, violence and deviancy, commercialization and college sport, race and inequality, and nationalism and identity. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

### SOC 322U. United States Immigration.

Same as Mexican American Studies 374 (Topic 42). Utilizes a sociological perspective to gain an understanding of what social forces drive migration to the United States, how migrants organize their migration, and how immigration affects United States' society. Three lecture hours a week for one semester. Only one of the following may be counted: Mexican American Studies 374 (Topic: US Immigration), 374 (Topic 42), Sociology 321K (Topic: US Immigration), or 322U. Prerequisite: Upper-division standing.

### SOC 322V. Race, Gender, and Surveillance.

Same as African and African Diaspora Studies 372C (Topic 12), American Studies 321 (Topic 6), and Women's and Gender Studies 322 (Topic 8). Overview of theories in the sociology of social control, with a focus on risk, power, ethics, and surveillance. Examines historical transformations in social control and the distributions of power in the United States and global contexts, with attention to race, gender, and class. Subjects include: the transatlantic slave trade; prisons and punishment; the gaze, voyeurism, and reality television watching; the Internet; travel and state borders; privacy; and biometrics and the body. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 372C (Topic 12), 374E (Topic: Surveillance and Social Control), American Studies 321 (Topic 6), Sociology 321K (Topic: Surveillance and Social Control), 322V, Women's and Gender Studies 322 (Topic: Surveillance and Social Control), 322 (Topic 8). Prerequisite: Upper-division standing.

### SOC 323. The Family.

Same as Women's and Gender Studies 345 (Topic 2). The American family in historical and comparative perspective. Family history and origins; comparative family systems; social antecedents of family structure and process; family formation and dissolution; family and society; recent family changes and prospects for the future. Three lecture hours a week for one semester. Sociology 323 and Women's and Gender Studies 345 (Topic 2) may not both be counted. Prerequisite: Upper-division standing.

### SOC 323C. Policing.

Examines the purposes and structure of policing and the shifting roles and powers of police officers. Focuses on several critical issues in modern-day policing, including the effectiveness of various police strategies as well as their legitimacy. Considers limits on the ability of the police to control crime, and the ways in which individuals and communities work to police themselves. Three lecture hours a week for one semester. Sociology 308 (Topic: Critical Issues in Policing) and 323C may not both be counted. Prerequisite: Upper-division standing.

### SOC 323D. Border Control and Deaths.

Same as Mexican American Studies 374 (Topic 41). Focus on enactment of border control policies, policy implementation and death patterns at the United States-Mexico border, patterns of unauthorized border crossings through dangerous border terrain, grassroots movements to support migrants and lessen deaths, and the ethics of coercive border control. Surveys the public sentiments and attitudes that support new border control policies, the patterns of migrant deaths in deserts and in the Rio Grande River associated with border control strategies, movements and community efforts to support migrants in the Arizona border area, and legal and ethical arguments and concepts that frame discussions of migrant deaths at the United States-Mexico border. Three lecture hours a week for one semester. Only one of the following may be counted: Mexican American Studies 374 (Topic: Border Control/Deaths), 374 (Topic 41), Sociology 321K (Topic: Border Control/Deaths), 323D. Prerequisite: Upper-division standing.

### SOC 323F. Food and Society.

Explores the social context of food; including food and identity, social class and culture, as well as who plans, purchases, and prepares food for our families. Food production and policies in the United States and government assistance for the hungry are also covered. Three lecture hours a week for one semester. Sociology 321K (Topic: Food and Society) and 323F may not both be counted. Prerequisite: Upper-division standing.

### SOC 323M. Sport and English Society.

Same as European Studies 346 (Topic 6). Restricted to students in the Maymester Abroad Program; contact the University's Study Abroad Office for permission to register for this class. Uses the context of sport to explore the internal divisions around class and region that are central to understanding English identity, particularly the tensions between "the north" and "the south," as well as to discover the origins of American sports such as football and baseball. The equivalent of three lecture hours a week for one semester. Taught in Leeds, England. Only one of the following may be counted: European Studies 346 (Topic: Sport and English Society), 346 (Topic 6), Kinesiology 350, Sociology 321K (Topic: Sport and English Society), 323M. Prerequisite: Upper-division standing.

### SOC 323S. Building the Sustainable City.

Same as Urban Studies 352 (Topic 7). Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 321K (Topic: Building the Sustainable City), 323S, Urban Studies 352 (Topic:

Building the Sustainable City), or 352 (Topic 7). Prerequisite: Upperdivision standing.

### SOC 324K. Social Change in Developing Nations.

Overview of changing social structure in the Third World. Three lecture hours a week for one semester. Latin American Studies 325 (Topic 2: Social Change in Developing Nations) and Sociology 324K may not both be counted. Prerequisite: Upper-division standing.

### SOC 325K. Criminology.

An investigation into the nature of criminal events, including homicide, rape, robbery, property crimes, and white-collar crimes. Also examines the United States criminal justice system. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

### SOC 325L. Sociology of Criminal Justice.

Same as Urban Studies 354 (Topic 12). Examination of the police, courts, and prisons: how they work, their impact on those who pass through them. Introduction to the American criminal justice system, its policies and procedures. The primary focus will be on the roles and functions of the police, the courts, and corrections, with a special emphasis on how well or not so well the system operates. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 325L, Urban Studies 354 (Topic: Sociology of Criminal Justice), 354 (Topic 12). Prerequisite: Upper-division standing.

### SOC 329. Social Stratification.

The types and levels of social inequality; the institutional and group processes that generate inequality; the interplay of social, organizational, economic, and political forces that affect the degree of differential opportunities and rewards in society. Three lecture hours a week for one semester. Prerequisite: Upper-division standing. Completion of Sociology 317L or another statistics course is recommended, but not required.

### SOC 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Sociology.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Sociology. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing.

### SOC 330C. Death and Dying: Sociological Perspectives.

Sociological perspectives on definitions of death; group differences in mortality rates and causes of death; social meanings of death and dying; treatment of the dying and the dead; and grief and bereavement. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

### SOC 330P. Sociology and Social Psychology.

Examines how individuals perceive, interact with, and affect other individuals from the perspectives of both psychology and sociology. Three lecture hours a week for one semester. Sociology 321K (Topic: Sociology and Social Psychology) and 330P may not both be counted. Prerequisite: Upper-division standing.

### SOC 333K. Sociology of Gender.

Same as Women's and Gender Studies 322 (Topic 1). Inequality between the sexes; men's and women's changing roles in society. Three lecture hours a week for one semester. Sociology 333K and Women's and

Gender Studies 322 (Topic 1: Sociology of Gender) may not both be counted. Prerequisite: Upper-division standing.

### SOC 335. Society of Modern Mexico.

Same as Latin American Studies 325 (Topic 1: Society of Modern Mexico) and Urban Studies 354 (Topic 2: Society of Modern Mexico). Family, community, industrialization, and urbanization in modern Mexico. Three lecture hours a week for one semester.

### SOC 336C. American Dilemmas.

Same as Urban Studies 354 (Topic 13) and Women's and Gender Studies 345 (Topic 26). Examination of critical American social problems, including problems in the economic, political, and health care systems, as well as inequities based on income, gender, and race. Exploration of how these problems are a natural outgrowth of the existing social structure. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 336C, Urban Studies 354 (Topic: American Dilemmas), 354 (Topic 13), Women's and Gender Studies 345 (Topic 26). Prerequisite: Upper-division standing.

### SOC 336D. Race, Class, and Health.

Designed to introduce students to the complex relationships among race, class, gender, and health status. Investigates how health is linked to individual behaviors and to the interaction between people and their social, cultural, and physical environments. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374 (Topic: Race, Class, and Health), Sociology 321K (Topic: Race, Class, and Health), 336D. Prerequisite: Upper-division standing.

### SOC 336G. Gender Politics in the Islamic World.

Same as Islamic Studies 373 (Topic 11), Middle Eastern Studies 341 (Topic 7), Religious Studies 358 (Topic 8), and Women's and Gender Studies 340 (Topic 44). Study of the Islamic world and major sociological concepts such as gender, social organizations, culture, and politics. Examines how culture is mediated by politics, resulting in diverse interpretations of Islam and in different policies with respect to women's rights. Three lecture hours a week for one semester. Only one of the following may be counted: Islamic Studies 373 (Topic: Gender Politics in the Islamic World), 373 (Topic 11), Middle Eastern Studies 322K (Topic: Gender Politics in the Islamic World), 341 (Topic: Gender Politics in the Islamic World), 341 (Topic 7), Religious Studies 358 (Topic: Gender Politics in the Islamic World), 358 (Topic 8), Sociology 321K (Topic: Gender Politics in the Islamic World), 336G, Women's and Gender Studies 340 (Topic: Gender Politics in the Islamic World), 340 (Topic 44). Prerequisite: Upper-division standing.

### SOC 336P. Social Psychology and the Law.

How courts make use of social science, as well as how social scientists study the legal system. Considers the uses of social science across multiple types of legal domains, such as eyewitnesses to crime, jury trials, punishment, children in the courts, and a variety of public policy issues. Three lecture hours a week for one semester. Sociology 321K (Topic: Social Psychology and the Law) and 336P may not both be counted. Prerequisite: Upper-division standing.

### SOC 340C. Globalization.

Same as European Studies 346 (Topic 7). A sociological analysis of the interrelated economic, political, and cultural aspects of globalization. Examines the consequences of globalization for nations around the world and for groups within these nations. Three lecture hours a week for one semester. Only one of the following may be counted: European Studies 346 (Topic: Globalization), 346 (Topic 7), Sociology 321K (Topic: Globalization), 340C. Prerequisite: Upper-division standing.

### SOC 340D. Violence.

An overview of the different theories of interpersonal and group violence. Includes criminological theories of violent crime, as well as feuding, ethnic and nationalist violence, political violence, and aggression in intimate relations. Three lecture hours a week for one semester. Sociology 321K (Topic: Violence) and 340D may not both be counted. Prerequisite: Upper-division standing.

### SOC 340G. Sociology of Sexualities.

Same as Women's and Gender Studies 322 (Topic 5). Review of sociological perspectives on sexuality. Examines how social institutions in United States society shape sexual values, beliefs, and practices. Subjects include changing cultural images of sexuality, sexual identities, and social movements. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 321K (Topic: Sociology of Sexuality), 340G, Women's and Gender Studies 322 (Topic: Sociology of Sexuality), 322 (Topic 5). Prerequisite: Upper-division standing; Sociology 302; and Sociology 333K or three semester hours of coursework in women's and gender studies.

#### SOC 340L. Aging and the Life Course.

The biological, social, and psychological aspects of human aging from adolescence until death, with special emphasis on cultural norms and the social and demographic context in which aging occurs. Includes the challenges and problems of adjustment at each life stage, and the social, political, and economic consequences of increased longevity and changes in the age structure of the populations of modern societies. Three lecture hours a week for one semester. Sociology 321K (Topic: Aging and the Life Course) and 340L may not both be counted. Prerequisite: Upper-division standing.

#### SOC 341C. Medical Sociology.

Same as Health and Society 340 (Topic 11). Explores the social context of health, illness, and the health care system in American society. Discussion of the processes of medicalization and demedicalization, social factors influencing health and health care, the organization of the health care delivery system and patient outcomes, and the social meaning and experiences of illness. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 321K (Topic: Medical Sociology), 341C, or Health and Society 340 (Topic 11). Prerequisite: Upper-division standing.

### SOC 344. Racial and Ethnic Relations.

Contemporary racial and ethnic problems; emphasis on minority groups in the United States. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### SOC 350M. Sociology Internship Seminar.

Restricted to students in the College of Liberal Arts. Students serve as supervised, unpaid interns in an agency, organization, or business. Provides an opportunity for students to apply the knowledge and skills acquired in sociology and other liberal arts courses. Three lecture hours and at least nine hours of fieldwork a week for one semester. Prerequisite: Upper-division standing and credit or registration for six semester hours of coursework in sociology.

#### SOC 350N. Research Internship.

Fieldwork in research and analysis on sociological problems and institutions. About ten hours of fieldwork a week for one semester. Additional lecture hours may be required. May be repeated for credit. Prerequisite: Nine semester hours of coursework in sociology, a University grade point average of at least 3.00, upper-division standing, and consent of the faculty undergraduate adviser.

### SOC 352. Social Movements.

Same as American Studies 321 (Topic 7). Characteristics of crowds, publics, and social movements; their role in social organization and social change. Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 321 (Topic: Social Movements), American Studies 321 (Topic 7), Sociology 352. Prerequisite: Upper-division standing.

#### SOC 352D. Boundaries and Dilemmas.

Designed to explore policy issues linked to universal moral imperatives, violations of these imperatives, and how violations are justified. The objective is to clarify how students think about matters of life and death and help students develop research skills in a subject of significant policy importance. Three lecture hours a week for one semester. Only one of the following may be counted: Liberal Arts Honors 350 (Topic: Boundaries and Dilemmas), Sociology 352M (Topic: Boundaries and Dilemmas), 352D. Prerequisite: Upper-division standing.

#### SOC 352E. Media Industries and Entrepreneurship.

Same as Radio-Television-Film 365 (Topic 9). Examination of the social, political, and economic contexts in which media and culture are produced, distributed, and monetized. Emphasis on new media and communication technologies. Three lecture hours a week for one semester. Only one of the following may be counted: Radio-Television-Film 365 (Topic: Media Industries and Entrepreneurship), 365 (Topic 9), Sociology 352E, 352M (Topic: Media Industries and Entrepreneurship). Prerequisite: For radio-television-film majors, upper-division standing and twelve semester hours of lower-division coursework in radio-television-film; for others, consent of instructor.

#### SOC 352M. Topics in Interdisciplinary Social Science.

An interdisciplinary analysis of significant social, economic, and political issues. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites vary with the topic.

Topic 3: Language and Speech in American Society. Same as American Studies 321 (Topic 2: Language and Speech in American Society), Anthropology 325N, and Linguistics 373 (Topic 2: Language and Speech in American Society). Prerequisite: Upper-division standing, and Anthropology 302, 305, 307, or Linguistics 306. Topic 4: Language in Culture and Society. Same as Anthropology 325M and Linguistics 373 (Topic 3: Language in Culture and Society). Language as a cultural resource; functions of language in society; survey of language communities. Prerequisite: Anthropology 302, 305, 307, or Linguistics 306; or consent of instructor.

**Topic 5: Family Policy Issues.** Same as Women's and Gender Studies 345 (Topic 12: Family Policy Issues). Consideration of liberal, conservative, and centrist views concerning the major family policy issues facing the United States and other advanced industrial societies.

#### SOC 352S. Globalization and Social Media.

Same as Radio-Television-Film 365 (Topic 10). Issues surrounding the hype, myth, paradox, and reality of social media in a global context. Three lecture hours a week for one semester. Only one of the following may be counted: Asian American Studies 320 (Topic: Globalization and Social Media), Journalism 349T (Topic: Globalization and Social Media), Radio-Television-Film 331M (Topic: Globalization and Social Media), 365 (Topic 10), Sociology 321K (Topic: Globalization and Social Media), 352S. Prerequisite: Upper-division standing.

#### SOC 354K. Sociology of Health and Illness.

Application of sociological concepts and principles to the study of health professions, medical institutions, community medical organization, and

the distribution of illness. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

### SOC 358D. Health Policy and Health Systems.

Covers the essentials of health policy and law, including the ways that policy and legal issues impact health care and public health systems. Three lecture hours a week for one semester. Only one of the following may be counted: Health and Society 330, Public Health 358D, and Sociology 358D. Prerequisite: Upper-division standing.

### SOC 359. Labor and Labor Movements.

Overview of work organizations in the United States, with emphasis on globalization, inequality, and labor movements. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

### SOC 366. Deviance.

Analysis of social norms, conformity, and reactions to norm violations. Topics include behavioral forms of deviance such as suicide and drug abuse and nonbehavioral forms of deviance such as physical abnormality. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

### SOC 368D. Social Context of Public Health.

An introduction to the social and behavioral theories that inform the discipline of public health, including practical examples of the ways that these theories are used to understand health-related behaviors and health promotion. Includes data on population distributions of mortality and morbidity, health inequalities, and how underlying social structures impact the health of individuals and communities. Three lecture hours a week for one semester. Only one of the following may be counted: Public Health 356, 368D, or Sociology 368D. Prerequisite: Upper-division standing.

### SOC 369K. Population and Society.

Same as Women's and Gender Studies 322 (Topic 2). The study of populations, including their growth, age structure, and patterns of fertility, mortality, and migration; the social causes and consequences of these phenomena. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 369K, Women's and Gender Studies 322 (Topic: Population and Society), 322 (Topic 2). Prerequisite: Upper-division standing.

### SOC 369L. Analytical Demography.

Formal demography; stable population theory; life tables and techniques of mortality estimation; estimates and projections. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and college algebra or the equivalent.

### SOC 679H. Honors Tutorial Course.

Research into and development of a thesis topic and proposal followed by the writing and defense of a thesis. The equivalent of three lecture hours a week for two semesters. Prerequisite: For 679HA, upper-division standing and admission to the Sociology Honors Program; for 679HB, Sociology 679HA.

### SOC 379M. Sociological Theory.

Restricted to sociology majors. Critical examination of major sociological theories and their relevance to current research and social conditions. Three lecture hours a week for one semester. Prerequisite: Upper-division standing, and six semester hours of coursework in sociology or consent of instructor.

### SOC 379N. Conference Course.

Supervised individual study of selected problems in sociology. Conference course. May be repeated for credit. Prerequisite: Upperdivision standing, Sociology 302 or the equivalent, nine semester hours of upper-division coursework in sociology or related fields, a University grade point average of at least 3.00, and consent of the faculty undergraduate adviser.

### SOC 379P. Undergraduate Research Opportunity.

Restricted to sociology majors. Students participate in research-related activities with faculty members in the Department of Sociology. Activities may include collecting interview or survey data, analyzing statistics, synthesizing research literature, and coding qualitative data. Five to seven hours a week for one semester. May be repeated for credit but may only be taken once on the letter-grade basis. Prerequisite: Upper-division standing, Sociology 302 or the equivalent, nine semester hours of upper-division coursework in sociology or related fields, a University grade point average of at least 3.00, and consent of the faculty undergraduate adviser.

# Department of Spanish and Portuguese

Unless otherwise noted below or in the *Course Schedule* (http:// registrar.utexas.edu/schedules), all upper-division Portuguese courses are conducted in Portuguese, and all upper-division Spanish courses are conducted in Spanish.

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

### Portuguese Civilization: PRC

### **Lower-Division Courses**

### PRC 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Portuguese Civilization.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Spanish and Portuguese. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

### PRC 320E. Topics in Brazilian Studies.

Focuses on significant issues in Brazilian society and culture. Three lecture hours a week for one semester. May not be counted toward fulfillment of the foreign language requirement for any bachelor's degree. May be repeated for credit when the topics vary. Prerequisite: Upperdivision standing.

**Topic 1: Samba to Hip Hop: Brazilian Popular Music.** Same as Latin American Studies 328 (Topic 1). Examines the role of popular music in relationships of power with subordination and the impact of music as a form of cultural expression.

**Topic 2: Global Brazil: Immigration and Diaspora in Brazilian Culture.** Same as Latin American Studies 328 (Topic 2). Examination of twentieth-century literature, films, and other cultural artifacts that capture the multicultural reality of Brazilian society and challenge the image of Brazil as a unified, harmonious, racially-mixed nation. Subjects include contemporary textual and visual representations of the Brazilian diaspora in the United States and Europe. Only one of the following may be counted: Latin American Studies 328 (Topic 2), 370P (Topic 6), Portuguese Civilization 320E (Topic 2), Portuguese 375 (Topic 7).

**Topic 3: Afro-Luso-Brazilian Worlds.** Same as African and African Diaspora Studies 372G (Topic 8) and Latin American Studies 328 (Topic 3). Study of the myths and realities in the Afro-Luso-Brazilian worlds and the connections and contrasts between them. Only one of the following may be counted: African and African Diaspora Studies 372E (Topic: Afro-Luso-Brazilian Worlds), 374E (Topic: Afro-Luso-Brazilian Worlds), 374E (Topic: Afro-Luso-Brazilian Worlds), 374E (Topic: Afro-Luso-Brazilian Worlds), Latin American Studies 328 (Topic 3), 370P (Topic: Afro-Luso-Brazilian Worlds), Portuguese Civilization 320E (Topic: Afro-Luso-Brazilian Worlds), 320E (Topic 3).

### PRC 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Portuguese Civilization.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Spanish and Portuguese. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### Portuguese: POR

### **Lower-Division Courses**

### POR 601D. First-Year Portuguese I.

Development of speaking, listening, reading, and writing skills; building vocabulary, learning basic rules and terminology of grammar; and gaining a better understanding of Portuguese-speaking cultures, with focus on Brazil, in order to communicate in an accurate, effective, and informed manner within a variety of socio-cultural situations. Six lecture hours a week for one semester. Only one of the following may be counted: Portuguese 601D and 610D; 604; 406 and 407; 508; 610S.

### POR 303S. Portuguese for Professional Purposes.

Designed for students in a variety of disciplines who require basic Portuguese language skills while studying abroad. Three lecture hours a week for one semester. May not be counted toward fulfillment of the foreign language requirement for any bachelor's degree. May not be counted toward a major in Portuguese.

### POR 604. Accelerated First-Year Portuguese.

Designed primarily for language majors and students who demonstrate exceptional language ability or scholarship. Six lecture hours a week for one semester. Only one of the following may be counted: Portuguese 601D and 610D; 604; 406 and 407; 508; 610S. Prerequisite: Consent of the lower-division coordinator for Portuguese.

### POR 406 (TCCN: PORT 1411). First-Year Portuguese I.

Four lecture hours a week for one semester. Only one of the following may be counted: Portuguese 601D and 610D; 604; 406 and 407; 508; 610S.

### POR 407 (TCCN: PORT 1412). First-Year Portuguese II.

Four lecture hours a week for one semester. Only one of the following may be counted: Portuguese 601D and 610D; 604; 406 and 407; 508; 610S. Prerequisite: Portuguese 406 with a grade of at least C.

# POR 508. Alternate First-Year Portuguese for Spanish Students.

Designed to provide qualified Spanish students a rapid introduction to the Portuguese language; emphasis on grammar, vocabulary, and

translation in the context of Brazilian culture. Five lecture hours a week for one semester. Only one of the following may be counted: Portuguese 601D and 610D; 604; 406 and 407; 508; 610S. Prerequisite: Spanish 312L with a grade of at least B.

### POR 610D. First-Year Portuguese II.

Development of speaking, listening, reading, and writing skills; building vocabulary, learning basic rules and terminology of grammar; and gaining a better understanding of Portuguese-speaking cultures, with focus on Brazil, in order to communicate in an accurate, effective, and informed manner within a variety of socio-cultural situations. Six lecture hours a week for one semester. Only one of the following may be counted: 604, 610D, 610S. Only one of the following may by counted: Portuguese 610D, 612, 312K, 516. Prerequisite: Portuguese 601D or 407 with a grade of at least C.

### POR 610S. Portuguese for Spanish Speakers I.

Designed to provide qualified Spanish-speaking students a rapid introduction to Portuguese language. Development of speaking, listening, reading, and writing skills; building vocabulary, learning basic rules and terminology of grammar; and gaining a better understanding of Portuguese-speaking cultures, with a focus on Brazil, in order to communicate in an accurate, effective, and informed manner within a variety of socio-cultural situations. Six lecture hours a week for one semester. Only one of the following may be counted: Portuguese 601D and 610D; 604; 406 and 407; 508; 610S.

### POR 611D. Second-Year Portuguese.

Focuses on the development of speaking, listening, reading, and writing skills while building vocabulary. Reviews rules and terminology of Portuguese grammar. Introduces complex grammar structures and Portuguese speaking cultures, with a focus on Brazil, in order to communicate in an accurate, effective, and informed manner within a variety of socio-cultural situations. Six lecture hours a week for one semester. Only one of the following may be counted: Portuguese 611D; 611S; 612; 312K and 312L; 516. Prerequisite: Portuguese 508, 610D, 610S, or 312K with a grade of at least C.

### POR 611S. Portuguese for Spanish Speakers II.

Continuation of Portuguese 610S. Six lecture hours a week for one semester. Only one of the following may be counted: Portuguese 611S, 612, 312K and 312L, 516. Portuguese 610D and 611S may not both be counted. Portuguese 611D and 611S may not both be counted. Prerequisite: Portuguese 604, 508, or 610S with a grade of at least C.

# POR 612. Accelerated Second-Year Portuguese: Oral Expression, Reading, and Composition.

Covers the same material as Portuguese 312K and 312L, but in one semester. Six lecture hours a week for one semester. Only one of the following may be counted: Portuguese 610D and 611D; 611S; 612; 312K and 312L; 516. Prerequisite: Portuguese 604 or 508 with a grade of at least B, or Portuguese 407 with a grade of A; and consent of the lowerdivision coordinator for Portuguese.

# POR 312K (TCCN: PORT 2311). Second-Year Portuguese I: Oral Expression, Reading, and Composition.

Three lecture hours a week for one semester. Only one of the following may be counted: Portuguese 610D and 611D; 611S; 612; 312K and 312L; 516. Prerequisite: Portuguese 604, 407, or 508 with a grade of at least C.

# POR 312L (TCCN: PORT 2312). Second-Year Portuguese II: Oral Expression, Reading, and Composition.

Three lecture hours a week for one semester. Only one of the following may be counted: Portuguese 610D and 611D; 611S; 612; 312K and 312L; 516. Prerequisite: Portuguese 312K with a grade of at least C.

# POR 516. Alternate Second-Year Portuguese for Spanish Speakers.

For qualified Spanish-speaking students, continued practice in the Portuguese language; emphasis on oral expression, vocabulary expansion, writing, and review of grammar in the context of cultural and literary readings. Five class hours a week for one semester. Only one of the following may be counted: Portuguese 610D and 611D; 611S; 612; 312K and 312L; 516. Prerequisite: Portuguese 508 with a grade of at least B.

### POR 318. Conversation and Composition.

Intensive practice in oral expression, based on cultural readings, with some writing. Three lecture hours a week for one semester. Prerequisite: Portuguese 312L. With consent of the lower-division coordinator for Portuguese, Portuguese 312L may be taken concurrently.

### POR 319C. Culture and Conversation.

Designed to improve oral skills and speaking strategies in different discourse genres including informal, formal, academic, and travel. Analysis and discussion of videos, films, short stories, and news articles highlighting Portuguese-speaking culture, with a focus on Brazil. Three lecture hours a week for one semester. Prerequisite: Portuguese 611D, 611S, 612, 312L, or 516.

### POR 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Portuguese.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Spanish and Portuguese. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

### POR 321. Sounds and Intonation.

Introduction to the study of Portuguese phonetics and phonology, focusing on four aspects: mechanisms of sound production, representation of sounds and intonation, dialect variation, and comparison with English. Three lecture hours a week for one semester. Prerequisite: Portuguese 327C or 362, and three hours of upper-division coursework in Portuguese or Portuguese Civilization.

### POR 322C. Conference Course in Luso-Brazilian Civilization.

Conference course. Prerequisite: Portuguese 611D, 611S, 612, or 312L, and written consent of the department chair.

### POR 322L. Conference Course in Luso-Brazilian Literature.

Conference course. Portuguese 611D, 611S, 612 or 312L, and written consent of the department chair.

### POR 327C. Advanced Grammar and Writing in Context.

Study and practice of Portuguese grammar, including reading exercises and guided composition designed to develop writing skills across styles. Students will be exposed to various topics in Portuguese language, literature, and culture. Three lecture hours a week for one semester. Portuguese 327C and 362 may not both be counted. Prerequisite: Portuguese 611D, 611S, 612, 312L, or 516.

### POR 328C. Introduction to Literatures and Cultures.

Same as Latin American Studies 370P (Topic 2). Overview of Luso-Brazilian literatures and cultures, including the arts and popular expressions from a multidisciplinary perspective. Among the regions studied are Brazil, Portugal, and related areas in Africa. Three lecture hours a week for one semester. Prerequisite: Portuguese 611D, 611S, 612, 312L, or 516.

# POR 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Portuguese.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Spanish and Portuguese. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### POR 130D. Portuguese across Disciplines.

Students read and discuss Portuguese language materials related to the subject matter of another designated course. One lecture hour a week for one semester May not be counted towards fulfillment of the foreign language requirement for any bachelor's degree. Prerequisite: One upperdivision Portuguese course or consent of instructor.

# POR 330L. Introduction to Language and Linguistics in Society.

Examines the dynamics of language structure and use throughout the Portuguese-speaking world. Covers topics such as sound systems, grammatical structures, historical developments, language learning and loss, dialect differences, and their social significance. Three lecture hours a week for one semester. Prerequisite: Portuguese 611D, 611S, 612, 312L, or 516.

### POR 341. Luso-Brazilian Civilization and Culture.

Analysis of social, political, and cultural aspects of Portugal and/or Brazil. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Portuguese 611D, 611S, 612, 312L, or 516.

**Topic 1: Afro-Brazilians: Literature, Culture, Political Agency.** Same as Latin American Studies 370P (Topic 12). Only one of the following may be counted: Latin American Studies 370P (Topic: Afro-Brazilians: Literature, Culture, Political Agency), 370P (Topic 12), Portuguese 341 (Topic: Afro-Brazilians: Literature, Culture, Political Agency), 341 (Topic 1).

**Topic 2: Cultural Differences Between the United States and Brazil.** Same as Latin American Studies 370P (Topic 13). Only one of the following may be counted: Latin American Studies 370P (Topic: Cultural Differences between USA and Brazil), 370P (Topic 13), Portuguese 341 (Topic: Cultural Differences between USA and Brazil), 341 (Topic 2).

### POR 343. Topics in Indigenous Cultures in the Americas.

Examines how indigenous writers, artists, and cultural producers have established their own voices and languages through writing and other forms of media. Analyzes the indigenous artistic and intellectual production in concrete political and cultural contexts. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Portuguese 327C or 362, and three hours of upper-division coursework in Portuguese or Portuguese Civilization.

### POR 344. Topics in Iberian Literatures and Cultures.

Themes and issues in the cultural production of the Iberian world. Examination of various cultural expressions as they apply to specific political and historical contexts. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Portuguese 327C or 362, and three hours of upper-division coursework in Portuguese or Portuguese Civilization.

**Topic 1: Lusophone African Literatures and Cultures**. Overview of the lusophone African literatures and cultures, especially in Angola, Mozambique, and Cape Verde. Portuguese 329 and 344 (Topic 1) may not both be counted.

### POR 348. Studies of African Cultures in Dialogue.

Studies the cultural production of African and Afro-descendant people in the Iberian and Latin American worlds. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Portuguese 327C or 362, and three hours of upper-division coursework in Portuguese or Portuguese Civilization.

**Topic 1: Race and Slavery in Brazil.** Same as Latin American Studies 370P (Topic 7). Focus on the differing meanings and values attributed by major Brazilian writers to the national "race." Topics include images of slavery and slaves in the Brazilian abolitionist literature; fictional and self-representational literature by Afro-Brazilian authors; the debate around the "Black Aesthetic"; and finally, the representation of Afro-Brazilians in other media such as film, painting, television, and popular music (samba, hip-hop, funk). Only one of the following may be counted: Latin American Studies 370P (Topic: The Color of Progress: Race and Slavery in Brazil), 370P (Topic 7), Portuguese 348 (Topic 1), 375 (Topic: The Color of Progress: Race and Slavery in Brazil).

**Topic 2: Afro-Brazilian Diaspora.** Same as Latin American Studies 370P (Topic 8). Examines Afro-Brazilians in the post-abolition (1888 and after) era and the strategies deployed by cultural producers and participants in social movements to overcome the barriers to the achievement of political power and self-determination.

**Topic 3: Brazilian and African Dialogues.** Same as Latin American Studies 370P (Topic 9). A general introduction to the colonial and post-colonial experiences of Portuguese-speaking Africa. Overview of the socio-political and economic experiences of the lusophone African countries under colonialism. Examination of the armed struggle and the combative literary outpourings that impacted morale in the fight for independence.

### POR 350F. Topics in Film and Media Cultures.

Audiovisual and media production treatment examined through themes in contemporary Iberian, Latin American, or African societies. Subjects include the analysis of the language, audiovisual, and media cultures and their implications. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Portuguese 327C or 362, and three hours of upper-division coursework in Portuguese or Portuguese Civilization.

**Topic 1: Contemporary Brazilian Film.** Same as Latin American Studies 370P (Topic 3). Explores recent filmmaking in Brazil as an art form and as a method of articulating important aspects and concerns of contemporary Brazilian society. Topics include cinema and development, modernization, national and regional identity, race, social exclusion, violence, and neoliberalism. Only one of the following may be counted: Latin American Studies 370P (Topic 3), Portuguese 350F (Topic 1), 350K.

**Topic 2: Brazilian Film and Culture.** Same as Latin American Studies 370P (Topic 4). Students will be given a critical overview of Brazilian cinema, from the silent era to the present day, with an emphasis on the late twentieth- and early twenty-first-centuries. Only one of the

following may be counted: Latin American Studies 370P (Topic 4), Portuguese 350F (Topic 2), Portuguese 350K.

#### POR 352. Brazilian and Spanish American Literature.

Brazilian and Latin American literature and culture from the twentieth century and later. Studies the literary trends and social roles in the region while comparing and contrasting the culture and history from both Spanish America and Brazil. Three lecture hours a week for one semester. Prerequisite: Portuguese 611D, 611S, 612, 312L, or 516.

### POR 353. Sociolinguistics.

Same as Latin American Studies 370P (Topic 11). Explores the interrelationship of language and society with reference to the Portuguese-speaking world. Examines how socio-economic , political, and anthropological factors like race, social class, gender, age, and identity influence linguistics forms. Three hours a week for one semester. Latin American Studies 370P (Topic 11) and Portuguese 353 may not both be counted. Prerequisite: Portuguese 327C or 362, and 330L.

# POR 354. United States Latino Literatures and Cultures in Context.

Same as Latin American Studies 370P (Topic 10). Examines the United States Latino literary and cultural production from a multidisciplinary perspective, through literature, film, music, and performance. Analyzes the literatures and experiences of Brazilian American writers and artists in their historical and cultural specificities. Three lecture hours a week for one semester. Latin American Studies 370P (Topic 10) and Portuguese 354 may not both be counted. Prerequisite: Portuguese 327C or 362, and three hours of upper-division coursework in Portuguese or Portuguese Civilization.

#### POR 362. Advanced Composition.

Translation of English texts into Portuguese and free composition; special attention to idiomatic expressions and to grammatical and syntactical features. Three lecture hours a week for one semester. Prerequisite: Portuguese 611D, 611S, 612, 312L, or 516.

### POR 364L. Applied Linguistics.

Introduction to the linguistic structure of Portuguese; application of linguistic principles to the teaching of Portuguese. Three lecture hours a week for one semester. Prerequisite: Portuguese 611D, 611S, 612, 312L, or 516.

#### POR 367P. Portuguese for the Professions.

Develop vocabulary, grammar, expressions, and interactional skills for professional purposes. Topics include cultural issues that influence professional activities in Portuguese-speaking communities. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Portuguese 327C or 362, and 330L.

**Topic 1: Business in Brazilian Life and Culture.** Same as Latin American Studies 322 (Topic 16). Cultural aspects of business practices in Brazil. Only one of the following may be counted: Latin American Studies 322 (Topic 16), 370P (Topic: Cultural Aspects of Doing Business in Brazil), Portuguese 367P (Topic 1), Portuguese Civilization 320E (Topic: Cultural Aspects of Doing Business in Brazil). Additional prerequisite: Portuguese 327C or 362, and 330L.

#### POR 368C. Topics in Languages in Contact.

Examination of Portuguese in contact with other languages among different regional varieties in historical and contemporary settings. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Portuguese 327C or 362, and 330L.

### POR 368S. Topics in Language Structure and Use.

Examines the major structural components of Portuguese and how these are used in context to fulfill a variety of communicative functions. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Portuguese 327C or 362, and 330L.

### POR 375. Topics in Brazilian Literature and Culture.

Important themes or issues in the Brazilian culture production. Designed to explore various cultural expressions and to understand them in specific political and historical contexts. Also may explore the cultural dialogues Brazil has established with other nations or regions. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Portuguese 327C or 362, and three hours of upper-division coursework in Portuguese or Portuguese Civilization.

**Topic 5: Brazil: An Introduction.** Same as Latin American Studies 370P (Topic 1: Brazil: An Introduction).

Topic 6: Gender, Sexuality, and Labor in Brazilian Culture. Same as Latin American Studies 370P (Topic 5). Introduction to the vast spectrum of working women characters, including maids, prostitutes, teachers, factory workers, doctors, street vendors, and unpaid housewives, in Brazilian literature and film, in order to examine the roles of race and gender in shaping the stereotypes surrounding women's labor in modern Brazil. Latin American Studies 370P (Topic 5) and Portuguese 375 (Topic 6) may not both be counted. Topic 7: Global Brazil: Immigration and Diaspora in Brazilian Culture. Same as Latin American Studies 370P (Topic 6). Examination of twentieth-century literature, films, and other cultural artifacts that capture the multicultural reality of Brazilian society and challenge the image of Brazil as a unified, harmonious, racially-mixed nation. Subjects include contemporary textual and visual representations of the Brazilian diaspora in the United States and Europe. Latin American Studies 370P (Topic 6) and Portuguese 375 (Topic 7) may not both be counted. Additional prerequisite: Portuguese 327C and one of the following: 328C, 330L, or Portuguese Civilization 320E.

#### POR 378H. Honors Seminar.

Honors seminar on a special topic in literature, linguistics, or civilization. The equivalent of three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing, admission to the Portuguese Honors Program, and consent of the honors adviser.

### POR 379C. Capstone Seminar in Literatures and Cultures.

Central issues, concepts, and themes that define Luso-Brazilian literatures and cultures. Focus on a specific case study or case studies that result in the production of a research paper on a particular topic of interest. Three semester hours a week for one semester. Prerequisite: Portuguese 327C, 328C, and twelve hours of upper-division coursework in Portuguese.

### POR 379H. Honors Tutorial Course.

Supervised individual research on a literary, linguistic, or cultural problem, culminating in a written thesis. The equivalent of three lecture hours a week for one semester. Prerequisite: Credit or registration for Portuguese 379C or 379L, upper-division standing, admission to the Iberian and Latin American Languages and Cultures Honors Program, and consent of the honors adviser.

### POR 379L. Capstone Seminar in Linguistics.

Central issues, concepts, and themes that define linguistics. Focus on a specific case study or case studies that result in the production of a research paper on a particular topic of interest. Three lecture hours a week for one semester. Prerequisite: Portuguese 327C, 330L, and twelve hours of upper-division coursework in Portuguese.

### Spanish Civilization: SPC

### **Lower-Division Courses**

### SPC 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Spanish Civilization.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Spanish and Portuguese. University credit is awarded for work in an exchange program; it may be counted as cousework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

### SPC 320C. Topics in Iberian or Latin American Studies.

Significant issues in Iberian or Latin American societies and cultures. Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

**Topic 1: Jewish Voices from Latin America.** Same as Jewish Studies 363 (Topic 15) and Latin American Studies 328 (Topic 4). An introduction to Jewish writers from Brazil and Latin America, with an emphasis on those whose works portray the situation of the Jewish communities in their respective cities and countries. Only one of the following may be counted: Jewish Studies 363 (Topic: Latin American Jewish Writers), 363 (Topic 15), Latin American Studies 328 (Topic 4), 370S (Topic: Latin American Jewish Writers), 370S (Topic 32), Spanish 352 (Topic), 355 (Topic 3), Spanish Civilization 320C (Topic 1). Prerequisite: Upper-division standing.

**Topic 2: Mediascapes: Literature and Media in the Caribbean.** Same as Latin American Studies 328 (Topic 5). Analyzes the relationship between literature and media technologies in contemporary Caribbean cultures. Only one of the following may be counted: Latin American Studies 328 (Topic 5), 370S (Topic 28), Spanish Civilization 320C (Topic 2), Spanish 350K (Topic 5).

### SPC 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Spanish Civilization.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Spanish and Portuguese. University credit is awarded for work in an exchange program; it may counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### Spanish: SPN

### **Lower-Division Courses**

# SPN 301. Spanish for Graduate Students in Other Departments.

For graduate students in other departments seeking to fulfill degree language requirements. No auditors. Purpose: To introduce fundamentals of grammar and lexicon to enable students to read texts in their areas of specialization. Primary aim: To allow students to acquire reading proficiency. Also presents audio-aural aspect. Three class hours a week for one semester. Offered every fall semester. May not be used to fulfill the undergraduate foreign language requirement. Offered on the letter-grade basis only. Prerequisite: Graduate standing.

### SPN 601D. First-Year Spanish I.

Focus on the development of multilingual literacy through the analysis and use of Spanish to achieve linguistic competence (simple present and past tenses, pronouns, adjectives), communication and interactional competence (complimenting, thanking, requesting, giving opinions), and metalinguistic competence (parts of speech, sociolinguistic cues, dialectal differences). Six lecture hours a week for one semester. Only one of the following may be counted: Spanish 601D, 604, 506. Only one of the following may be counted: Spanish 601D, 604, 507, 508K.

### SPN 303S. Spanish for Professional Purposes.

Designed for students in a variety of disciplines who require basic Spanish language skills while studying abroad. Three lecture hours a week for one semester. May not be counted toward fulfillment of the foreign language requirement for any bachelor's degree. May not be counted toward a major in Spanish.

# SPN 604. Accelerated Introductory Spanish for Heritage Learners.

Designed primarily for students who have a cultural and linguistic connection to Spanish. Six lecture hours a week for one semester. Only one of the following may be counted: Spanish 601D, 604, 506. Only one of the following may be counted: Spanish 601D, 604, 507, 508K. Spanish 604 and 312K may not both be counted. Spanish 604 and 610D may not both be counted.

# SPN 305. Spanish for Graduate Students in Other Departments.

No auditors. Continuation of Spanish 301. Vocabulary and grammar expansion through intense practice in reading texts according to class interests; increased emphasis on the audio-aural aspect. Three lecture hours a week for one semester. Offered every spring semester. May not be used to fulfill the undergraduate foreign language requirement. Offered on the letter-grade basis only. Prerequisite: Graduate standing, and Spanish 301 or consent of instructor.

### SPN 506 (TCCN: SPAN 1511). First-Year Spanish I.

Designed for students who have not previously studied any Spanish. Five lecture hours a week for one semester. Only one of the following may be counted: Spanish 601D, 604, 506.

### SPN 507 (TCCN: SPAN 1512). First-Year Spanish II.

Five lecture hours a week for one semester. Only one of the following may be counted: Spanish 601D, 604, 507, 508K. Prerequisite: Spanish 506 with a grade of at least C.

### SPN 508K. Alternate First-Year Spanish II.

An accelerated review of grammatical structures covered in Spanish 506, followed by study of the new material covered in Spanish 507. Five lecture hours a week for one semester. Only one of the following may be counted: Spanish 601D, 604, 507, 508K. Prerequisite: Transfer credit or credit by examination for Spanish 506, or high school coursework in Spanish, or credit for Spanish 506 earned at the University of Texas at Austin more than one calendar year ago, with a grade of at least C.

### SPN 610D. First-Year Spanish II.

Focus on the development of multilingual literacy through the analysis and use of Spanish to achieve linguistic competence (commands, subjunctive, hypotheticals, future), communication and interactional competence (disagreeing, suggesting, turn taking), and metalinguistic competence (critical analysis of oral and written texts, dialectal differences). Six lecture hours a week for one semester. Only one of the following may be counted: Spanish 604, 610D, 312K. Prerequisite: Spanish 601D, 507, or 508K with a grade of at least C.

#### SPN 611D. Second-Year Spanish.

Focus on the development of multilingual literacy through the analysis and use of Spanish to achieve linguistic competence (aspect, mood, compound tenses, passive voice), communication and interactional competence (pragmatics, cultural perspectives), and metalinguistic competence (critical analysis of oral and written texts, dialectal differences). Six lecture hours a week for one semester. Only one of the following may be counted: Spanish 611D, 612, 312L. Prerequisite: Spanish 604, 610D or 312K with a grade of at least C.

# SPN 612. Accelerated Intermediate Spanish for Heritage Learners.

Designed primarily for students who have a cultural and advanced linguistic connection to Spanish. Six lecture hours a week for one semester. Only one of the following may be counted: Spanish 611D, 612, 312L. Prerequisite: Spanish 604 or 610D with a grade of at least C.

### SPN 312K (TCCN: SPAN 2311). Second-Year Spanish I.

Three lecture hours a week for one semester. Spanish 610D and 312K may not both be counted. Spanish 604 and 312K may not both be counted. Prerequisite: Spanish 604, 507, or 508K with a grade of at least C.

### SPN 312L (TCCN: SPAN 2312). Second-Year Spanish II.

Three lecture hours a week for one semester. Only one of the following may be counted: Spanish 611D, 612, 312L. Prerequisite: Spanish 312K with a grade of at least C.

### SPN 318. Conversation and Composition.

Designed to give intensive practice in oral expression, based on cultural readings, with some writing. Three lecture hours a week for one semester. Spanish 315N and 318 may not both be counted. May not be counted toward a major in Spanish. This course or the equivalent is recommended but not required for all majors in Spanish. Prerequisite: Spanish 611D or 312L.

### SPN 319. Advanced Oral Expression.

Designed to develop listening comprehension and oral skill to an advanced level. Three lecture hours a week for one semester. May not be counted toward a major in Spanish. Recommended for all Spanish majors. Prerequisite: Consent of instructor.

### SPN 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Spanish.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Spanish and Portuguese. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May not be counted toward a major in Spanish. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### SPN 327C. Advanced Grammar and Writing in Context.

Study and practice of Spanish grammar that includes reading exercises and guided composition designed to develop writing skills across styles. Students will be exposed to various topics in Spanish language, literature, and culture. Three lecture hours a week for one semester. Only one of the following may be counted: Spanish 327C, 327G, or 327N. Prerequisite: Spanish 611D, 612, or 312L.

### SPN 327N. Academic Writing for Heritage Speakers.

Designed specifically for heritage speakers of Spanish and includes a wide range of cultural readings and writing tasks. Aims to strengthen the clarity and organization of writing, promote critical thinking, and master grammar points of particular concern to heritage speakers. Three lecture hours a week for one semester. Only one of the following may be counted: Spanish 327C, 327G, or 327N. Prerequisite: Spanish 611D, 612, or 312L.

### SPN 327W. Advanced Grammar and Composition II.

Develops writing skills needed for upper-division coursework in Spanish. Emphasizes grammar in Spanish language, literature, and culture, exploring different compositional styles. Three lecture hours a week for one semester. Prerequisite: Spanish 327C (or 327G) or 327N with a grade of at least C.

### SPN 328. Spanish Civilization.

A survey of the social, political, and cultural history of Spain. Three lecture hours and one discussion hour a week for one semester. Prerequisite: Spanish 611D, 612, or 312L.

### SPN 328C. Introduction to Literatures and Cultures.

Same as Latin American Studies 370S (Topic 27). Overview of Iberian and/or Latin American literatures and cultures, including the arts and popular expressions, from a multidisciplinary perspective. Among the regions studied are Spain; North, Central, and South America; the Caribbean; and related areas in Africa. Three lecture hours a week for one semester. Only one of the following may be counted: Latin American Studies 370S (Topic 27), Spanish 328, 328C. Only one of the following may be counted: Latin American Studies 370S (Topic 3), 370S (Topic 27), Spanish 322K, 328C. Prerequisite: Spanish 611D, 612, or 312L.

# SPN 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Spanish.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Spanish and Portuguese. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May not be counted toward a major in Spanish. May be repeated for credit when the topics vary.

### SPN 130D. Spanish across Disciplines.

Students read and discuss Spanish language materials related to the subject matter of another designated course. One lecture hour a week for one semester. May not be counted toward fulfillment of the foreign language requirement for any bachelor's degree. Prerequisite: One upperdivision Spanish course or consent of instructor.

# SPN 330L. Introduction to Language and Linguistics in Society.

Examines the dynamics of language structure and use throughout the Spanish-speaking world, and covers topics such as sound systems, grammatical structures, historical developments, language learning and loss, and dialect differences and their social significance. Spanish 330L and 345L may not both be counted. Prerequisite: Spanish 611D, 612, or 312L.

### SPN 346. Sounds and Intonation.

Introduction to the study of Spanish phonetics and phonology, focusing on four aspects: mechanisms of sound production, representation of sounds and intonation, dialect variation, and comparison with English. Three lecture hours a week for one semester. Prerequisite: Spanish 327C (or 327G) or 327N, and 330L.

### SPN 348C. Topics in Community Engagement.

Service learning course combining research project and engagement with local Spanish-speaking communities. Three lecture hours a week for one semester, with additional community service hours to be arranged. May be repeated for credit when the topics vary. Prerequisite: Spanish 327C (or 327G), or 327N.

**Topic 1: Service Learning & Research in Spanish.** Research on a subject that affects the Spanish-speaking members of the community, supported by a service internship in a relevant site. Students will choose from subjects related to affordable housing; literacy and education; nutrition and health services; immigration and deportation. The equivalent of three lecture hours a week for one semester, with additional fieldwork hours to be arranged. Spanish 348C (Topic 1) and 367P (Topic: Service Learning and Research in Spanish) may not both be counted.

### SPN 350K. Topics in Film and Media Cultures.

Examines important themes in Iberian, Latin American, or African societies and examines their treatment in audiovisual and media production. Three lecture hours a week for one semester. Spanish 350 and 350K may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Spanish 327C (or 327G) or 327N, and 328C.

Topic 1: Gender Issues in Contemporary Latin American Cinema. Same as Latin American Studies 370S (Topic 24) and Women's and Gender Studies 335 (Topic 6). Studies Latin American cinema as a device of gender system formation and reinforcement, and as criticism of patriarchal hegemony; discusses questions related to sexuality depicted in Latin American films. Subjects covered include: maternity, prostitution, machismo, children's sexuality, homosexuality, heterosexuality, and gender violence in films from the 1930s to present. Conducted in Spanish. Three lecture hours a week for one semester. Only one of the following may be counted: Latin American Studies 370S (Topic 24), Spanish 350 (Topic: Gender in Contemporary Latin American Cinema), 350K (Topic 1), Women's and Gender Studies 335 (Topic 6), 340 (Topic: Gender in Contemporary Latin American Cinema). Additional prerequisite: Spanish 327C, (or 327), (or 327G), and three hours of upper-division coursework in either Spanish or Spanish Civilization.

**Topic 2: Violence in Spanish Film.** Focus on representations of violence in film from and about Spain since the 1920s to present. Includes the Spanish Civil War, torture, and other state-sanctioned violence; children and violence; violence against women; homophobic violence; terrorism; and ethnic and racist violence.

**Topic 3: Latin American Film and Culture.** Same as Latin American Studies 370S (Topic 25: Latin American Film and Culture). Overview of Latin American cinema from the silent era to present, with an emphasis on the last forty years. Subjects covered include: the development of the film industry (particularly in Argentina and Mexico in the 1930s and 1940s); the "New Wave" of Latin American cinema in the 1960s; and contemporary trends. Taught in Spanish. Three lecture hours a week for one semester. Only one of the following may be counted: Latin American Studies 370S (Topic 25), Spanish 350 (Topic: Latin American Film and Culture), 350K (Topic 3).

**Topic 4: Latin American Literature and Film.** Same as Latin American Studies 370S (Topic 26: Latin American Literature and Film). Studies, in a broad sense, the connections between Latin American cinema and literature, through extensive readings and in-class movie exhibitions. A number of renowned literary works by Latin American authors and their film versions will be analyzed with a comparative approach. Only one of the following may be counted:

Latin American Studies 370S (Topic 26), Spanish 350 (Topic: Latin American Literature and Film), 350K (Topic 4), 352 (Topic: Literature and Cinema in Spanish America).

Topic 5: Mediascapes: Literature and Media in the Caribbean. Same as Latin American Studies 370S (Topic 28). Analyzes the relationship between literature and media technologies in contemporary Caribbean cultures. Examination of the notion and uses of Caribbean mediascapes; in other words, the uses of media technologies derived from film, television, the internet and YouTube, and the ways they are used and read in the Spanish Caribbean. Only one of the following may be counted: Latin American Studies 328 (Topic 5), 370S (Topic 28), Spanish 350K (Topic 5), Spanish Civilization 320C (Topic 2). Topic 6: Indigenous Voices: From Nezahualcoyotl to Radio. Same as Latin American Studies 370S (Topic 29). Examines how Indigenous writers, intellectuals, and cultural producers have creatively established their own voices through writing and other forms of media. Only one of the following may be counted: Latin American Studies 370S (Topic: Indigenous Voices), 370S (Topic 29), Spanish 350 (Topic: Indigenous Voices), 350K (Topic 6).

### SPN 351. Don Quijote and the Early Modern World.

Study of Cervantes's Don Quijote in depth in the original Spanish. Examines the author's views on artistic freedom, as well as his manipulation of literary genres and conventions, with his questions regarding the dominant political, religious, and literary discourses of early modern Spain. Three lecture hours a week for one semester. Prerequisite: Spanish 327C (or 327G) or 327N, and 328C.

# SPN 352. Topics in Spanish and Spanish American Literature.

Major writers and works of Spanish and Spanish American literature. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

Topic 1: Spain in 1492. Spanish 350 (Topic: Spain in 1492) and 352 (Topic 1) may not both be counted. Prerequisite: Spanish 325K, 325L, 326K, or 326L.

Topic 2: Literature of the Spanish Civil War. Prerequisite: Spanish 325K, 325L, 326K, or 326L.

Topic 3: The Latin American Short Story. Examination of the most representative Latin American authors as a course of study in the art of storytelling, literary history, individual poetics, and narrative theories. Prerequisite: Spanish 325K, 325L, 326K, or 326L. Topic 4: Contemporary Caribbean Literature. Same as Latin American Studies 370S (Topic 44). Only one of the following may be counted: Latin American Studies 370S (Topic: Contemporary Caribbean Literature), 370S (Topic 44), Spanish 352 (Topic: Contemporary Caribbean Literature), 352 (Topic 4). Prerequisite: Spanish 611D, 612, or 312L.

### SPN 353. Sociolinguistics.

Explores the interrelationship of language and society, with reference to the Spanish-speaking world. Studies how socioeconomic, political, and anthropological factors like race, social class, gender, age, and identity influence linguistics forms. Three lecture hours a week for one semester. Prerequisite: Spanish 327C (or 327G) or 327N, and 330L (or 345L).

#### SPN 355. Topics in Latin American Literatures and Cultures.

Study of important themes or issues in the cultural production of the Latin American world. Among the regions studied are Spain; North, Central, and South America; the Caribbean; and related areas in Africa. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Spanish 327C (or 327G) or 327N, and 328C.

**Topic 1: Fantastic Fiction from Latin America.** Same as Latin American Studies 370S (Topic 30). Analysis of short stories by Latin American writers that in some way represent an alternative to realism. Latin American Studies 370S (Topic 30) and Spanish 355 (Topic 1) may not both be counted.

Topic 2: Nonfiction Narratives from Latin America. Same as Latin American Studies 370S (Topic 31). Study of nonfiction works written in contemporary Latin America as experimental narrative forms that offer insight about current political, social, and economic problems of the region. Examination of these realities through readings and careful analysis of the works of popular nonfiction Latin American writers. Topic 3: Jewish Voices from Latin America. Same as Latin American Studies 370S (Topic 32). Overview of popular Jewish writers from Brazil and Spanish America, with special emphasis on those who portray in their work the situation of the Jewish communities of their respective cities and countries. Only one of the following may be counted: Jewish Studies 363 (Topic: Latin American Jewish Writers), 363 (Topic 15), Latin American Studies 328 (Topic 4), 370S (Topic: Latin American Jewish Writers), 370S (Topic 32), Spanish 352 (Topic: Latin American Jewish Writers), 355 (Topic 3), Spanish Civilization 320C (Topic 1).

**Topic 4: Sex and Sexuality in Latin America.** Same as Latin American Studies 370S (Topic 33). Examines different representations of sex, sexuality, and eroticism in the various cultures of Latin America. These concepts do not refer to explicit or provocative texts or images in books, films, or photographs alone. On the contrary, they include a vast gamut of life, love, pain, and social conflict. Only one of the following may be counted: Latin American Studies 370S (Topic: Sexo/Sexualidad en Latinoamerica), 370S (Topic 33), Spanish 352 (Topic: Sexo/Sexualidad en Latinoamerica), 355 (Topic 4).

**Topic 5: Revolutionary Imagination in Latin American Cultures.** Same as Latin American Studies 370S (Topic 34). Explores literary expressions in Latin America that reflect a dissident or transgressive imaginary published during the revolutionary period (1960-1990). Examination of how different sociohistorical experiences require new narrative forms, and innovative ways of exploring and codifying collective community identities. Only one of the following may be counted: Latin American Studies 370S (Topic: Revolutionary Imagination in Latin American Literature), 370S (Topic 34), Spanish 352 (Topic: Revolutionary Imagination in Latin American Literature), 355 (Topic 5).

**Topic 6: Violence in Contemporary Mexican Culture.** Same as Latin American Studies 370S (Topic 23) and Women's and Gender Studies 340 (Topic 20). Studies the representation of violence in contemporary literary and cultural production in Mexico in order to understand social, political, and cultural implications of current violence there. Taught in Spanish. Only one of the following may be counted: Latin American Studies 370S (Topic 23), Spanish 350 (Topic 13), 355 (Topic 6), Women's and Gender Studies 340 (Topic 20). Additional prerequisite: Spanish 327C (or 327G) and three hours of upper-division coursework in Spanish or Spanish Civilization.

**Topic 7: East/West/New World Encounters.** Same as Latin American Studies 370S (Topic 36). Survey of works mostly in the Latin American and Hispanic literary tradition in which images or themes related to the East (Asia, Eastern Africa, the Middle East) are developed. Only one of the following may be counted: Latin American Studies 370S (Topic: Visions of the East in Latin American Writing), 370S (Topic 36), Spanish 352 (Topic: Visions of the East in Latin American Writing), 355 (Topic 7).

**Topic 8: Memory and Writing in Caribbean Culture.** Same as Latin American Studies 370S (Topic 37). Studies literary works from the greater Caribbean basin (with a focus on Cuba and Puerto Rico) in which the act of remembering is emphatically dramatized and described. Only one of the following may be counted: Latin American Studies 370S (Topic: Writing and Memory in Caribbean Literature), 370S (Topic 37), Spanish 355 (Topic 8), 375 (Topic: Writing and Memory in Caribbean Literature).

**Topic 9: Literary Figurations in the Multimedia Age.** Same as Latin American Studies 370S (Topic 38). Focuses on the figurations of sounds and images in literary language in the context of the multimedia environment of modern and contemporary Latin America. Only one of the following may be counted: Latin American Studies 370S (Topic: Literary Figurations in the Multimedia Age), 370S (Topic 38), Spanish 352 (Topic: Literary Figurations in the Multimedia Age), 355 (Topic 9).

### SPN 356. Topics in Indigenous Cultures in the Americas.

Examines how indigenous writers, artists, and cultural producers have established their own voices and languages through writing and other forms of media. Analysis of the indigenous artistic and intellectual production in concrete political and cultural contexts. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Spanish 327C (or 327G) or 327N, and 328C.

**Topic 1: Indigenous Voices in Latin American Literature.** Same as Latin American Studies 370S (Topic 17). Only one of the following may be counted: Latin American Studies 370S (Topic 17), Spanish 350 (Topic 4), 356 (Topic 1). Additional prerequisite: Spanish 327C (or 327G) and three hours of upper-division coursework in Spanish or Spanish Civilization.

**Topic 2: The Imagined Andes.** Same as Latin American Studies 370S (Topic 22). Overview of literature and culture of the Andean regions. Three lecture hours a week for one semester. Only one of the following may be counted: Latin American Studies 370S (Topic: The Imagined Andes), 370S (Topic 22), Spanish 350 (Topic 12), 356 (Topic 2). Additional prerequisite: Spanish 327C (or 327G) and three hours of upper-division coursework in Spanish or Spanish Civilization.

**Topic 3: Contemporary Mesoamerican Indigenous Literatures.** Same as Latin American Studies 370S (Topic 41). Examines the early Mesoamerican mythological narrative, Popol Wuj, as well as twentiethcentury Central American texts. Explores ethnicity, class, gender, and traditional cultures as main factors in regional negotiations of identity constructions. Only one of the following may be counted: Latin American Studies 370S (Topic: Contemporary Indigenous Literature), 370S (Topic 41), Spanish 352 (Topic: Contemporary Indigenous Literature), 356 (Topic 3).

### SPN 357. Topics in Iberian Literatures and Cultures.

Study of important themes or issues in the cultural production of the Iberian world. Subjects include various cultural expressions and their relevance in specific political and historical contexts. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Spanish 327C (or 327G) or 327N, and 328C.

**Topic 1: Hispanic Chivalry.** Study of the origins of chivalry with mounted warriors in feudal and crusading warfare. Emphasis on how knights became either the goons and enforcers, robbers of barons, or heroes and protectors of the people with the end of the crusading and Reconquest eras. Only one of the following may be counted: Latin American Studies 370S (Topic: Hispanic Chivalry), Spanish 350 (Topic: Hispanic Chivalry), 357 (Topic 1).

**Topic 2: Cultures in Contact in Medieval Spain.** Focus on the works of literature that reflect the three cultures which coexisted and flourished for almost eight centuries in medieval Spain: the Islamic, the Jewish, and the Christian. Only one of the following may be counted: Spanish 350 (Topic 8), 352 (Topic: Literature of Spain of Three Cultures), 357 (Topic 2).

**Topic 3: Space in Contemporary Iberian Literatures and Cultures.** Studies the representation of space in contemporary Spanish literature, with an emphasis on questions of gender, sexuality, memory, class, and artistic imagination. Spanish 357 (Topic 3) and 372 (Topic: Space in Contemporary Spanish Literature) may not both be counted. **Topic 4: Violence and Identity in Early Modern Spain**. Examines the tensions between individual and society, between self and other, in the dramatic literature of early modern Spain, focusing on the themes of war, conquest, race, sex, and gender. Only one of the following may be counted: Latin American Studies 370S (Topic: Violence and Identity in Early Modern Spain), Spanish 357 (Topic 4), or 376 (Topic: Violence and Identity in Early Modern Spain).

#### SPN 358. Studies of African Cultures in Dialogue.

Study of the cultural production of African and Afro-descendant people of the Iberian and Latin American worlds. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Spanish 327C (or 327G) or 327N, and 328C.

**Topic 1: African Diasporas.** Same as Latin American Studies 370S (Topic 42). Analysis of the sociocultural contexts of the African diaspora in the Americas with particular focus on the Caribbean and Brazil. Focuses on the contributions of the African diasporic populations and the stylistic strategies through which they constructed their social, political, and cultural agency. Only one of the following may be counted: Latin American Studies 370S (Topic: African Diaspora in Latin America and the Caribbean), 370S (Topic 42), Spanish 358 (Topic 1), 375 (Topic: African Diaspora in Latin America and the Caribbean).

# SPN 359. United States Latino Literatures and Cultures in Context.

Same as Latin American Studies 370S (Topic 43). Examines the United States Latino literary and cultural production from multidisciplinary perspectives, such as literature, film, music, and performance. Analysis of the literatures and experiences of United States Latino writers and artists in their historical and cultural specificities. Three lecture hours a week for one semester. Latin American Studies 370S (Topic 43) and Spanish 359 may not both be counted. Prerequisite: Spanish 327C (or 327G) or 327N, and 328C.

#### SPN 364L. Linguistics and the Spanish Learner.

Focuses on instructed and naturalistic second language (L2) development among adults. Subjects include: L2 acquisition theories, Spanish learners' difficulties, learners' and teachers' beliefs about L2, learners' motivations and needs, and heritage language learners. Three lecture hours a week for one semester. Prerequisite: Spanish 327C (or 327G) or 327N, and 330L (or 345L).

#### SPN 365C. Conference Course in Hispanic Civilization.

Conference course. Prerequisite: Spanish 612 or 312L; and written consent of the department chair.

#### SPN 365G. Conference Course in Hispanic Linguistics.

Conference course. Prerequisite: Spanish 612 or 312L; and written consent of the department chair.

#### SPN 365L. Conference Course in Hispanic Literature.

Conference course. Prerequisite: Spanish 612 or 312L; and written consent of the department chair.

#### SPN 367P. Spanish for the Professions.

Develops vocabulary, grammar, expressions, and interactional skills that are related to foreign language for professional purposes. Also covers cultural issues that affect professional activities in Spanish-speaking communities. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Spanish 327C (or 327G) or 327N. **Topic 1: Spanish for Health Care Professions.** Same as Latin American Studies 322 (Topic 17). Designed to exercise fluency in both spoken and written language in health care situations. Focus on the complex grammatical concepts and cultural issues that affect professional activities in Spanish-speaking communities. Only one of the following may be counted: Latin American Studies 322 (Topic 17), Spanish 367K (Topic 7), 367P (Topic 1). Additional prerequisite: Spanish 327C (or 327G), 328C, and 330L.

**Topic 2: Business in Hispanic Life and Culture.** Same as Latin American Studies 322 (Topic 18). Only one of the following may be counted: Latin American Studies 322 (Topic 18), 370S (Topic 19), Spanish 350 (Topic 10), Spanish 367P (Topic 2). Prerequisite: Spanish 327C (or 327G) and 328C.

**Topic 3: Translation Principles and Practice.** Spanish 367K (Topic 4) and 367P (Topic 3) may not both be counted. Prerequisite: Spanish 327C (or 327G) and 330L.

# SPN 367T. Advanced Oral and Written Expression for Teachers.

Designed to help teacher candidates prepare to pass the state oral and written proficiency exams at the advanced level to obtain certification. Focus on oral proficiency for various genres of speaking with an emphasis on writing and reading of different genres. Three lecture hours a week for one semester. Spanish 367K (Topic 1) and Spanish 367T may not both be counted. Prerequisite: Spanish 327C (or 327G) or 327N, and 330L.

### SPN 368C. Topics in Languages in Contact.

Investigates Spanish in contact with other languages and among different regional varieties in historical and contemporary settings. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Spanish 327C (or 327G) or 327N, and 330L.

### SPN 368S. Topics in Language Structure and Use.

Examination of the major structural components of the language and how these are used in context to fulfill a variety of communicative functions. Three lecture hours a week for one semester. Spanish 367K and 368S may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Prerequisite: Spanish 327C (or 327G) or 327N, and 330L.

**Topic 1: Rhetoric and Composition for Native Speakers.** Writing and oral expression for use in academic and professional settings. Only one of the following may be counted: Mexican American Studies 374 (Topic 31), Spanish 367K (Topic 8), 368S (Topic 1).

### SPN 377H. Honors Tutorial Course.

Supervised individual research on a literary, linguistic, or cultural problem, culminating in a written thesis. The equivalent of three lecture hours a week for one semester. Prerequisite: Upper-division standing, credit or registration for Spanish 379C or 379L, admission to the Iberian and Latin American Languages and Cultures Honors Program, and consent of the Honors adviser.

### SPN 379C. Capstone Seminar in Literatures and Cultures.

Brings together central issues, concepts, and themes that define Iberian or Latin American literatures and cultures, while focusing on a specific case-study or case-studies. Three lecture hours a week for one semester. Prerequisite: Spanish 327C (or 327G), 328C, and twelve hours of upperdivision coursework in Spanish.

### SPN 679H. Honors Tutorial Course.

Supervised individual research on a literary, linguistic, or cultural problem, culminating in a written thesis of fifty to eighty typewritten pages. Conference course for two semesters. Prerequisite: For 679HA,

upper-division standing, admission to the Spanish Honors Program, and consent of the honors adviser; for 679HB, Spanish 679HA.

### SPN 379L. Capstone Seminar in Linguistics.

Brings together central issues, concepts, and themes that define linguistics, while focusing on a specific case-study or case-studies, that allow for the necessary depth and rigor to produce a research paper on a particular topic of interest. Three lecture hours a week for one semester. Prerequisite: Spanish 327C (or 327G), 330L, and twelve hours of upperdivision coursework in Spanish.

# **UTeach-Liberal Arts**

### **UTeach-Liberal Arts: UTL**

### **Lower-Division Courses**

### UTL 101. Introduction to the Teaching Profession.

Weekly seminar with a University faculty member plus a field experience in an area elementary school under the supervision of a cooperating teacher. Course readings and instruction complement the field experience. Seminar topics include basic classroom management, lesson design, assessment, technology, diversity, and special student populations. One class hour a week for one semester; at least ten hours of fieldwork a semester are also required. Offered on the letter-grade basis only. Prerequisite: Successful admission into the UTeach-Liberal Arts program and consent of the UTeach adviser in the College of Liberal Arts.

### UTL 202. Introduction to Teaching in the Middle School.

Weekly seminar with a University faculty member plus a field experience in an area middle school under the supervision of a cooperating teacher. Course readings and instruction complement field experience. Seminar topics include classroom management, lesson design, assessment, technology, diversity, special student populations, conferencing techniques, and school organization. Two class hours a week for one semester; at least twenty hours of fieldwork a semester are also required. Offered on the letter-grade basis only. Prerequisite: UTeach-Liberal Arts 101 with a grade of at least B, and consent of the UTeach adviser in the College of Liberal Arts.

### UTL 303E. Teaching English in the High School.

Weekly seminar with a University faculty member, plus field experience in an area high school under the supervision of a cooperating teacher. Course readings and instruction complement field experience. Seminar topics include state and national standards, curriculum design and implementation, the role of technology in education, and teaching strategies with a special focus on innovative strategies for teaching literature and writing. Three lecture hours a week for one semester; at least forty-five hours of fieldwork a semester are also required. Offered on the letter-grade basis only. Prerequisite: UTeach-Liberal Arts 101 and 202 with a grade of at least B in each; concurrent enrollment in Curriculum and Instruction 370S (Topic 1: Advanced Methods in English, Language Arts, and Reading); and consent of the UTeach adviser in the College of Liberal Arts.

# UTL 303L. Teaching Languages Other Than English in the High School.

Weekly seminar with a University faculty member, plus field experience in an area high school under the supervision of a cooperating teacher. Course readings and instruction complement the field experience. Seminar topics include state and national standards and their implementation, teaching for proficiency, curriculum design, assessment, best practices, the instructional environment, and the role of technology in teaching languages other than English. Three lecture hours a week for one semester; at least forty-five hours of fieldwork a semester are also required. Offered on the letter-grade basis only. Prerequisite: UTeach-Liberal Arts 101 and 202 with a grade of at least B in each; concurrent enrollment in Curriculum and Instruction 370S (Topic 5: Advanced Methods in Foreign Language); and consent of the UTeach adviser in the College of Liberal Arts.

### UTL 303S. Teaching Social Studies in the High School.

Weekly seminar with a University faculty member, plus field experience in an area high school under the supervision of a cooperating teacher. Course readings and instruction complement the field experience. Seminar topics include social studies topics, standards, curriculum design and implementation, teaching strategies, technology, and vertical and horizontal teaming in social studies. Three lecture hours a week for one semester; at least forty-five hours of fieldwork a semester are also required. Offered on the letter-grade basis only. Prerequisite: UTeach-Liberal Arts 101 and 202 with a grade of at least B in each; concurrent enrollment in Curriculum and Instruction 370S (Topic 3: Advanced Methods in Social Studies); and consent of the UTeach adviser in the College of Liberal Arts.

# UTL 304. Middle School Teaching for Postbaccalaureate Certification.

Designed for college graduates seeking teacher certification. Students observe and teach in a middle school under the supervision of a mentor teacher, and participate in a weekly seminar. Seminar topics may include classroom management, lesson design, assessment, technology, diversity, special student populations, conference techniques, and professional development. Three lecture hours and two hours of fieldwork a week for one semester. May not be counted toward any degree. Prerequisite: Consent of the UTeach adviser in the College of Liberal Arts.

### **Upper-Division Courses**

### UTL 320. Topics in Teaching the Liberal Arts.

Introduction to various topics related to middle grades, secondary, and all-level teaching certification. Topics may include history, social studies, English language arts, and languages other than English. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Consent of the UTeach adviser in the College of Liberal Arts.

### UTL 640. Teaching in Secondary Schools.

Restricted to students entering the professional development sequence of the UTeach-Liberal Arts program. Course readings and instruction complement the field experience. Seminar topics include theoretical foundations for subject-specific methods, state and national standards and their implementation, teaching for proficiency, curriculum design, assessment, best practices, the instructional environment, and the role of technology in teaching. The equivalent of six lecture hours and four fieldwork hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: UTeach-Liberal Arts 101 and 202 with a grade of at least B in each, and consent of the UTeach adviser in the College of Liberal Arts.

### UTL 341R. Overcoming Reading Difficulties.

Restricted to UTeach-Liberal Arts students. Subjects may include the basic terminology related to special needs students, recognizing differences in learning disabilities, evaluating teaching methods and materials, and teaching strategies that address the needs of special needs students, with a special focus on reading strategies. Three lecture hours a week for one semester. Rhetoric and Writing 379C (Topic: Overcoming Reading Difficulties) and UTeach-Liberal Arts 341R may not both be counted. Offered on the letter-grade basis only. Prerequisite: Applied Learning and Development 322 and consent of instructor.

### UTL 360. Problems and Principles of Secondary Education.

Restricted to students in the final student teaching semester of the UTeach-Liberal Arts program. Draws upon resources found in the directed-teaching environment; considers problems and issues in four broad areas: students in the school, the teacher's professional responsibilities, curriculum understandings, and administrative and organizational problems. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Concurrent enrollment in UTeach-Liberal Arts 670, and consent of the UTeach adviser in the College of Liberal Arts.

### UTL 670. Directed Teaching in Secondary Schools.

Restricted to students in the final student teaching semester of the UTeach-Liberal Arts program. Observation and teaching in secondary school classrooms as well as an exploration of other roles of the secondary school teacher, under the joint supervision of University and public school personnel. The equivalent of two lecture hours and forty fieldwork hours a week for one semester. Offered on the pass/fail basis only. Prerequisite: Concurrent enrollment in UTeach-Liberal Arts 360, and consent of the UTeach adviser in the College of Liberal Arts.

# Center for Women's and Gender Studies

### Women's and Gender Studies: WGS

### **Lower-Division Courses**

# WGS 301. Introductory Topics in Women's and Gender Studies.

Three lecture hours a week for one semester, or as required for the topic. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 2: Introduction to Child Psychology.** General introduction to physical, social, and cognitive development from conception onward. Prerequisite: Psychology 301 with a grade of at least C.

**Topic 4: Family Relationships.** Same as Human Development and Family Sciences 304. The process of family interaction over the life cycle. Application of research findings to the understanding of relationships. Only one of the following may be counted: Human Development and Family Sciences 304, 304H, Women's and Gender Studies 301 (Topic 4).

**Topic 6: Ethnicity and Gender. La Chicana.** Same as Mexican American Studies 311 and Sociology 308D. Three lecture hours a week for one semester. Only one of the following may be counted: Mexican American Studies 311, 319 (Topic 1), Sociology 308 (Topic: Ethnicity and Gender. La Chicana), 308D, Women's and Gender Studies 301 (Topic 6).

**Topic 7: Women's Reproductive Health for Nonscience Majors.** Same as Nursing 307 (Topic 1) and Sociology 310S. Overview of contemporary women's reproductive health issues, with emphasis on historical, physiological, psychosocial, and cultural influences that affect the reproductive health of women during adolescence, the childbearing years, and midlife. Three lecture hours a week for one semester. Only one of the following may be counted: Nursing 307 (Topic 1), Sociology 308 (Topic 2), 310S, Women's and Gender Studies 301 (Topic 7). Additional prerequisite: One year of high school biology, or Biology 301L or 309D.

**Topic 11: United States Women, Sexuality, and Gender to 1865.** Same as History 317L (Topic 5). History 317L (Topic 5) and Women's and Gender Studies 301 (Topic 11) may not both be counted.

**Topic 12: Gay and Lesbian Literature and Culture.** Same as English 314V (Topic 4: Gay and Lesbian Literature and Culture). American writing by gay, lesbian, bisexual, transgender, or queer authors and/ or with gay, lesbian, bisexual, transgender, or queer themes. English 314V (Topic 4) and Women's and Gender Studies 301 (Topic 12) may not both be counted.

**Topic 13: Mexican American Women, 1910-Present.** Same as History 317L (Topic 12) and Mexican American Studies 319 (Topic 4). Examines the history of Mexican and Mexican American women in the United States from the twentieth century to the present. Only one of the following may be counted: History 317L (Topic: Mexican American Women, 1910-Present), 317L (Topic 12), Mexican American Studies 319 (Topic: Mexican American Women, 1910-Present), 317L (Topic: Mexican American Women's and Gender Studies 301 (Topic: Mexican American Women, 1910-Present), 301 (Topic 13).

**Topic 14: Performance, Feminism, and Social Change.** Same as African and African Diaspora Studies 311C. Exploration of the ways that engaged performance and feminist practice generate space for social change, including the basic principle that social transformation requires individual awareness, and that awareness necessitates a rigorous examination of race, gender, class, and sexuality. Only one of the following may be counted: African and African Diaspora Studies 311C, 317F (Topic: Performance, Feminism, and Social Change), Women's and Gender Studies 301 (Topic: Performance, Feminism, and Social Change), 301 (Topic 14).

**Topic 15: Yoruba Women.** Same as African and African Diaspora Studies 317C (Topic 2). Examination of gender construction in Yorubaland, including an exploration of the difference between Western gender construction and African notions of gender through analyses of the religious, linguistic, cultural, and sociopolitical aspects of Yoruba life. Only one of the following may be counted: African and African Diaspora Studies 317C (Topic: Yoruba Women), 317C (Topic 2), Women's and Gender Studies 301 (Topic: Yoruba Women), 301 (Topic 15).

**Topic 16: Introduction to Black Women's Studies.** Same as African and African Diaspora Studies 317D (Topic 5). Interdisciplinary examination of the complexities of black womanhood in America through an investigation of history, identity, popular culture, and black feminism/ womanism, as well as social and political activism. Only one of the following can be counted: African and African Diaspora Studies 317D (Topic: Introduction to Black Women's Studies), 317D (Topic 5), Women's and Gender Studies 301 (Topic: Introduction to Black Women's Studies), 301 (Topic 16).

**Topic 17: Black Queer Art Worlds.** Same as African and African Diaspora Studies 317E (Topic 1) and Anthropology 310L (Topic 6). Exploration of over two decades of work produced by and about black queer subjects throughout the circum-Atlantic world. Provides an introduction to various artists and intellectuals of the black queer diaspora, as well as an examination of the viability of black queer aesthetic practice as a form of theorizing. Only one of the following may be counted: African and African Diaspora Studies 317E (Topic: Black Queer Diaspora Aesthetics), 317E (Topic 1), Anthropology 310L (Topic: Black Queer Diaspora Aesthetics), 310L (Topic 6), Women's and Gender Studies 301 (Topic: Black Queer Diaspora Aesthetics), 301 (Topic 17).

**Topic 18: Religion and Gender in America.** Same as Sociology 308F. Examines the complex relationship between religious involvement and gender and sexuality in American society with a focus on the historic relationship between religious engagement and women's movements as well as more contemporary issues. Exploration of several major religious traditions in the United States today, including Evangelical Christianity, Catholicism, and Judaism. Examination of smaller religious groups and their attempt to confront the complex and contradictory relationship between gender roles and belief. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 308 (Topic: Religion and Gender in America), 308F, Women's and Gender Studies 301 (Topic 18).

**Topic 19: Diversity in American Families.** Same as Sociology 307F. Examination of the diversity of American families and current debates on family life from a sociological perspective with an emphasis on how diverse family forms came to exist and what these changes mean for adults and children in contemporary society. Study of recent trends in several aspects of family life, including dating and courtship, cohabitation, marriage, divorce, parenthood, family structure, and work-family balance. Overview of theoretical perspectives on family life with a focus on gender, race/ethnicity, and sexuality. Three lecture hours a week for one semester. Only one of the following may be counted: American Studies 315 (Topic: Diversity in American Families), Sociology 307F, 308 (Topic: Diversity in American Families), 301 (Topic 19).

**Topic 20: Fertility and Reproduction.** Same as Sociology 307K. Explores the when, why, how, and with whom Americans bear children, and how the United States compares to other developed and developing countries in the world. Subjects include infertility and its treatments, the ethics of surrogacy and international adoption, voluntary childlessness, the rapid rise of nonmarital childbearing in the United States and other countries, the politics of childbirth, the risks of maternal morbidity and mortality in developed and developing countries, and the declining populations and rapid aging of rich countries including Japan, Italy, and Spain where many women have stopped having children. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 307K, 308 (Topic: Fertility and Reproduction), Women's and Gender Studies 301 (Topic: Fertility and Reproduction), 301 (Topic 20).

**Topic 21: Gender, Race, and Class in American Society.** Same as Sociology 307L. Use of the sociological perspective to analyze how the structure of American society, individual life, and group life chances are shaped by broader structures of privilege and disadvantage based on gender, race, and class. Examination of these in institutional arenas such as work, the family, education, health, the criminal justice system, sexuality, popular culture, and more. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 307L, 308 (Topic: Gender, Race, and Class in American Society), Women's and Gender Studies 301 (Topic: Gender, Race, and Class in American Society), 301 (Topic 21).

Topic 22: Race, Ethnicity, and Gender in Demography. Same as Sociology 308E. Introduction to the patterns, trends and debates on race, ethnicity, and gender in demography. Study of the social aspect of demography and the relationship of demographic phenomena relative to racial, ethnic, and gender populations. Specific areas will include the following: conceptual/measurement issues; migration and population dynamics; health and morality; and family and fertility. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 308 (Topic: Race, Ethnicity, and Gender in Demography), 308E, Women's and Gender Studies 301 (Topic 22). Topic 23: Romantic Relationships and Family Formation. Same as Sociology 308J. Examination of romantic relationships and family formation from a cultural framework. Subjects include: historical transformations of romance; socioeconomic perspectives on sexual relationships and family formation; the impact of demographic transitions on the emergence of cohabitation as a relationship form; the economics undergirding relationship decision making; common narratives, practices, and gender differences about entry into marriage in the West; and population-level implications of contemporary patterns. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 308 (Topic: Romantic Relationships and Family Formation), 308J, Women's and Gender Studies 301 (Topic 23).

Topic 24: Race, Immigration, and Family. Same as Asian American Studies 310 (Topic 5) and American Studies 315 (Topic 3). Introduction to family systems in the United States in a post-WWII framework with a central focus on Asian Americans. Students will investigate how gender, race, and ethnicity intersect and inform our understanding of the institution of the family. Only one of the following may be counted: American Studies 315 (Topic: Alternative Family Systems), 315 (Topic 3), Asian American Studies 310 (Topic: Alternative Family Systems), 310 (Topic 5), Women's and Gender Studies 301 (Topic: Alternative Family Systems), 301 (Topic 24). Topic 27: Women, Gender, Literature, and Culture. Same as English 314V (Topic 6). An introduction to literary analysis focusing on women's and gender studies. English 314V (Topic 6) and Women's and Gender Studies 301 (Topic 27) may not both be counted. Topic 28: History of Human Sexuality. Same as History 306N (Topic 15). The history of human sexuality is approached from four angles: sexual behaviors; sexual consequences; sexual regulation, and sexual science. Only one of the following may be counted: History 306N (Topic: History of Human Sexuality), 306N (Topic 15), Women's and Gender Studies 301 (Topic: History of Human Sexuality), 301 (Topic 28).

# WGS 303. Introduction to Lesbian, Gay, Bisexual, Transgender, and Queer Studies.

Explores concepts of gender and sexuality, race, class, religion, and nation; as well as skills in theory, history, and research methods relevant to LGBTQ studies. The course will also survey the making of modern understandings of sexual and LGBTQ identities in the last one hundred years and the implications of this history for broader understandings of gender and sexuality. Three lecture hours a week for one semester. Women's and Gender Studies 301 (Topic: Introduction to LGBTQ Studies) and 303 may not both be counted. Prerequisite: Consent of instructor.

### WGS 305. Introduction to Women's and Gender Studies.

Introduction to the role of gender identity and representation in key social institutions and processes, including borders, displacements, and diasporas. Analysis of the social narratives of gender, race, and sexuality. Three lecture hours a week for one semester. Women's and Gender Studies 301 (Topic: Introduction to Women's and Gender Studies) and 305 may not both be counted.

### WGS 313. Child Development.

Same as Human Development and Family Sciences 313. Motor, language, cognitive, social, and emotional development in the family context. Three lecture hours a week for one semester. Only one of the following may be counted: Human Development and Family Sciences 313, 313H, Women's and Gender Studies 301 (Topic 5), 313. Prerequisite: Credit or registration for Human Development and Family Sciences 113L, and Psychology 301 with grade of at least C-.

### WGS 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Women's and Gender Studies.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Center for Women's and Gender Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

# WGS 321. Introduction to Women's and Gender Studies in the Humanities.

Multidisciplinary course examining the creative work of women and the image of women in history and art. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

# WGS 322. Introduction to Women's and Gender Studies in the Social Sciences.

Multidisciplinary topics using approaches from the social sciences to examine gender constructs and male/female roles. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites vary with the topic.

**Topic 1: Sociology of Gender.** Same as Sociology 333K. Inequality between the sexes; men's and women's changing roles in society. Three lecture hours a week for one semester. Sociology 333K and Women's and Gender Studies 322 (Topic 1: Sociology of Gender) may not both be counted. Additional prerequisite: Upper-division standing. **Topic 2: Population and Society.** Same as Sociology 369K. The study of populations, including their growth, age structure, and patterns of fertility, mortality, and migration; the social causes and consequences of these phenomena. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 369K, Women's and Gender Studies 322 (Topic: Population and Society), 322 (Topic 2). Additional prerequisite: Upper-division standing.

**Topic 3: Sociology of Masculinities.** Same as Sociology 322M. Sociological examination of the most important debates and discussions about men's experiences of masculinity in contemporary patriarchal societies. Exploration of social and individual meanings of masculinity, the dominant paradigms of masculinity that are taken as the norm, and the problems, contradictions, and paradoxes men experience in modern society. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 321K (Topic: Sociology of Masculinities), 322M, Women's and Gender Studies 322 (Topic: Sociology of Masculinities), 322 (Topic 3). Additional prerequisite: Upper-division standing, three hours of coursework in sociology, and three hours of coursework in women's and gender studies.

**Topic 5: Sociology of Sexualities.** Same as Sociology 340G. Review of sociological perspectives on sexuality. Examines how social institutions in United States society shape sexual values, beliefs, and practices. Subjects include changing cultural images of sexuality, sexual identities, and social movements. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 321K (Topic: Sociology of Sexuality), 340G, Women's and Gender Studies 322 (Topic: Sociology of Sexuality), 322 (Topic 5). Additional prerequisite: Upper-division standing; Sociology 302; and Sociology 333K or three semester hours of coursework in women's and gender studies.

**Topic 6: The Sociology of Race and Work.** Same as Asian American Studies 330 (Topic 4) and Sociology 321R. Critical examination of work in the United States over the twentieth and twenty-first centuries through a gendered, Asian American lens, using a comparative race perspective. Subjects include the sociological examination of concepts such as labor markets, globalization, care work, and gender/ racial segregation in the workplace along with the ways race and gender shape how and where individuals are fitted into the workplace, how skills are evaluated, and how labor markets emerge. Three lecture hours a week for one semester. Only one of the following may be counted: Asian American Studies 330 (Topic: Sociology of Race and Work), 330 (Topic 4), Sociology 321K (Topic: Sociology of Race and Work), 321R, Women's and Gender Studies 322 (Topic: Sociology of Race and Work), 322 (Topic 6). Additional prerequisite: Upper-division standing.

**Topic 7: Race and the Digital.** Same as African and African Diaspora Studies 322D and Sociology 322D. Review of theoretical developments in the sociological study of "race," including an examination of processes of racialization and cultural texts, in order to better understand the ways in which identities are socially produced. Attention will be placed on forms of popular culture, black cultural production, and political action to question how such practices are shaped by migrations within the African diaspora. Only one of the following may be counted: African and African Diaspora Studies 322D, 374E (Topic: Race, Culture, and Migration), Sociology 321K (Topic: Race, Culture, and Migration), 322D, Women's and Gender Studies 322 (Topic: Race, Culture, and Migration), 322 (Topic 7). Additional prerequisite: Upper-division standing.

Topic 8: Race, Gender, and Surveillance. Same as African and African Diaspora Studies 372C (Topic 12), American Studies 321 (Topic 6), and Sociology 322V. Overview of theories in the sociology of social control, with a focus on risk, power, ethics, and surveillance. Examines historical transformations in social control and the distributions of power in the United States and global contexts, with attention to race, gender, and class. Subjects include: the transatlantic slave trade; prisons and punishment; the gaze, voyeurism, and reality television watching; the Internet; travel and state borders; privacy; and biometrics and the body. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 372C (Topic 12), 374E (Topic: Surveillance and Social Control), American Studies 321 (Topic 6), Sociology 321K (Topic: Surveillance and Social Control), 322V, Women's and Gender Studies 322 (Topic: Surveillance and Social Control), 322 (Topic 8). Additional prerequisite: Upper-division standing.

**Topic 10: Sex and Violence in Popular Culture.** Same as Sociology 322P. Overview of the cultural framing of sex and violence through realistic and hyper-realistic representations of sex, love, violence, and war in popular culture. Examination of the ethical implications, including the ways in which these representations rely on and further social inequalities and the sociological concepts, methods, and theoretical approaches to understanding sex and violence in popular culture. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 321K (Topic: Sex and Violence in Popular Culture), 322P, Women's and Gender Studies 322 (Topic 10), 345 (Topic: Sex and Violence in Popular Culture). Additional prerequisite: Upper-division standing.

# WGS 323. Introduction to Women's and Gender Studies in the Natural Sciences.

Examination of gendered constructs such as gender and sexual development, male and female differences and similarities, and feminist or alternative scientific epistemologies using approaches from the natural sciences. Three lecture hours a week for one semester, or as required by the topic. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

### Topic 2: Human Physical Growth and Development.

# WGS 324. Introduction to Women's and Gender Studies in Communication.

Multidisciplinary course examining issues of women, gender, and sexuality in media industries, texts, and audiences. Three lecture hours a week for one semester, or as required for the topic. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 2: Women and Media Culture**. Introduction to the study of women's relations to media culture. Three lecture hours and two and one-half screening hours a week for one semester. Prerequisite: For radio-television-film majors: upper-division standing and the

following coursework, with a grade of at least C in each course: Radio-Television-Film 305, either 314 or 316, and six additional semester hours of lower-division coursework in radio-television-film; for others, upper-division standing and consent of instructor.

**Topic 4: Gender and the News.** Same as Journalism 348D. Historical and contemporary exploration of gender and the news. Examination of the role of marginalized gender groups in producing news and the construction of gender within news texts. Three lecture hours a week for one semester. Only one of the following may be counted: Journalism 348D, Women's and Gender Studies 324 (Topic 4), 345 (Topic: Women and the News). Additional prerequisite: For journalism majors, Journalism 310F with a grade of at least B-; for others, six semester hours of upper-division coursework in women's and gender studies.

#### WGS 125. Special Topics in Women's and Gender Studies.

Analysis of special topics in women's and gender studies through reading, discussion, and lectures. One lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

# WGS 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Women's and Gender Studies.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Center for Women's and Gender Studies. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### WGS 333D. Introduction to Developmental Psychology.

Same as Psychology 333D. Physical, social, and cognitive development in humans. Three lecture hours a week for one semester. Only one of the following may be counted: Psychology 304, 333D, Women's and Gender Studies 333D, 345 (Topic 6). Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology 317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

#### WGS 333R. Social Development in Children.

Same as Psychology 333R. Development of social behavior (for example, sex typing and aggression) and social relationships. Three lecture hours a week for one semester. Only one of the following may be counted: Psychology 333R, Women's and Gender Studies 333R, 345 (Topic 19). Prerequisite: For psychology majors, upper-division standing and Psychology 301 and 418 with a grade of at least C in each; for others, upper-division standing, Psychology 301 with a grade of at least C, and one of the following with a grade of at least C: African and African Diaspora Studies 302M, Civil Engineering 311S, Economics 329, Educational Psychology 371, Electrical Engineering 351K, Government 350K, Mathematics 316, 362K, Mechanical Engineering 335, Psychology

317, Sociology 317L, Social Work 318, Statistics 309, Statistics and Data Sciences 301, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), 306 (or Statistics and Scientific Computation 306), 318 (or Statistics and Scientific Computation 318), 321 (or Statistics and Scientific Computation 321), 328M (or Statistics and Scientific Computation 328M).

# WGS 335. Topics in Lesbian, Gay, Bisexual, Transgender, and Queer Studies.

The perspectives, experiences, and cultural contributions of lesbian, gay, bisexual, transgender, and queer people, examined from different disciplinary and/or interdisciplinary perspectives according to the topic. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites vary by topic.

**Topic 1: Confronting LGBTQ Oppression.** Restricted to students admitted to the Peers for Pride Program. Serves two primary functions: to increase participant's knowledge on the issues facing the Lesbian, Gay, Bisexual, Transgender, and Queer (LGBTQ) community; and to learn facilitation skills in order to talk about these issues on campus. Enrolled students will become peer educators in a team, and will give workshops across campus around LGBTQ issues during the spring semester. Only one of the following may be counted: Social Work 360K (Topic: Confronting LGBTQ Oppresion), Women's and Gender Studies 335 (Topic 1), 345 (Topic: Confronting LGBTQ Oppression).

Topic 2: Facilitating Dialogues on LGBTQ Oppression: Peers for Pride in Action. Restricted to students in the Peers for Pride program. The second part of the Peers for Pride facilitation program; serves as a way for students in the program to use the information and skills learned in "Confronting LGBTQ Oppression." Students will continue to fine-tune their facilitation skills and continue learning about LGBTQ people on the UT campus and beyond. Only one of the following may be counted: Social Work 360K (Topic: Facilitating Dialogues on LGBTQ Oppression: Peers for Pride in Action), Women's and Gender Studies 335 (Topic 2), 345 (Topic: Facilitating Dialogues on LGBTQ Oppression: Peers for Pride in Action). Additional prerequisite: Consent of instructor.

Topic 3: African Queer Studies. Same as African and African Diaspora Studies 372G (Topic 7). Examines the development of African queer studies as the interdisciplinary study of sexuality on the African continent, and its impact on the academic and activist realm. Focus on intersectional feminist and queer theory and how this field offers tools that can be used to rethink issues of oppression and domination in relationship to race, nation, sex, gender, and sexuality on the African continent. Of particular interest will be LGBTQ activism and the ways in which queer Africans engage and shape their sexuality, and create forms of belonging in their countries and their communities. Only one of the following may be counted: African and African Diaspora Studies 372G (Topic: African Queer Studies), 372G (Topic 7), Women's and Gender Studies 335 (Topic 3), 340 (Topic: African Queer Studies). Topic 4: Sexual Deviance in the Twentieth-Century United States. Same as American Studies 370 (Topic 50). Examines the ways that Americans have created and maintained hierarchies of power by casting certain people and sexual behaviors as unnatural and immoral since the turn of the twentieth century. Only one of the following may be counted: American Studies 370 (Topic: Sexual Deviance in the Twentieth-Century US), 370 (Topic 50), Women's and Gender Studies 335 (Topic: Sexual Deviance in the Twentieth-Century US), 335 (Topic 4). Additional prerequisite: Upper-division standing.

**Topic 6: Gender Issues in Contemporary Latin American Cinema.** Same as Latin American Studies 370S (Topic 24) and Spanish 350K (Topic 1). Studies Latin American cinema as a device of gender system formation and reinforcement, and as criticism of patriarchal hegemony; discusses questions related to sexuality depicted in Latin American films. Subjects covered include: maternity, prostitution, machismo, children's sexuality, homosexuality, heterosexuality, and gender violence in films from the 1930s to present. Conducted in Spanish. Three lecture hours a week for one semester. Only one of the following may be counted: Latin American Studies 370S (Topic 24), Spanish 350 (Topic: Gender in Contemporary Latin American Cinema), 350K (Topic 1), Women's and Gender Studies 335 (Topic 6), 340 (Topic: Gender in Contemporary Latin American Cinema). Additional prerequisite: Spanish 327C, (or 327), (or 327G), and three hours of upper-division coursework in either Spanish or Spanish Civilization. Topic 7: Queer Study in Low Culture. Same as American Studies 370 (Topic 51). Examines representations of sexual and gender nonconformity in popular culture since the mid-twentieth century in the United States. Only one of the following may be counted: American Studies 370 (Topic: Queer Study in Low Culture), 370 (Topic 51), Women's and Gender Studies 335 (Topic: Queer Study in Low Culture), 335 (Topic 7). Additional prerequisite: Upper-division standing. Topic 8: Hip Hop Rhetorics. Same as African and African Diaspora Studies 372E (Topic 17). Examination of the hip hop rhetorics of writers, performers, and activists of the hip hop generation. Subjects include the use of cultural tools including rap, fashion, dance, graffiti, and deejaying, to construct their identities and make and disseminate meaning within and about their social worlds, particularly around issues of racism, sexism and misogyny, poverty, and heterosexism. Only one of the following may be counted: African and African Diaspora Studies 372E (Topic: Hip Hop Rhetorics), 372E (Topic 17), Women's and Gender Studies 335 (Topic 8).

**Topic 9: Movements for Sexual and Reproductive Justice.** Same as American Studies 370 (Topic 52). Charts the historical development of various struggles for sexual and reproductive justice in the United States since the nineteenth century. Only one of the following may be counted: American Studies 370 (Topic: Movements for Sexual and Reproductive Justice), 370 (Topic 52), Women's and Gender Studies 335 (Topic: Movements for Sexual and Reproductive Justice), 335 (Topic 9).

**Topic 16: Queer Media Studies.** Same as Radio-Television-Film 377H (Topic 2). Introduction to the critical analysis of queer media culture. Explores the dominant strategies used by the media industries to represent members of the LGBTQI community and their issues, as well as those utilized by lesbian, gay, bisexual, transgendered, queer, and intersexed folks in practices of self-representation. Also examines media reception practices among queer folks, as well as the alternative media economies developed by members of the LGBTQI community, and the intersections of queer identity, queer politics, and media culture. Only one of the following may be counted: Radio-Television-Film 359S (Topic: Queer Media Studies), 359S (Topic 5), 377H (Topic 2), Women's and Gender Studies 324 (Topic: Queer Media Studies), 335 (Topic 16).

**Topic 18: Twentieth-Century United States Lesbian and Gay History.** Same as American Studies 370 (Topic 49) and History 365G (Topic 10). Examines classic texts and recent and varied writings on LGBT history, focused on experiences, ideas, and conflicts that have shaped modern LGBT identities. Only one of the following may be counted: American Studies 370 (Topic: United States Lesbian and Gay History, Twentieth Century), 370 (Topic 49), History 365G (Topic: United States Lesbian and Gay History, Twentieth Century), 365G (Topic 10), Women's and Gender Studies 335 (Topic 18), 340 (Topic: United States Lesbian and Gay History, Twentieth Century).

**Topic 22: Queer Visual Culture.** Women's and Gender Studies 335 (Topic 22) and 345 (Topic: Queer Visual Culture) may not both be counted.

# WGS 340. Cross-Cultural Topics in Women's and Gender Studies.

Multidisciplinary course examining experiences and issues of gender in different cultures. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites vary with the topic.

**Topic 3: African American Family.** Same as African and African Diaspora Studies 321K and Social Work 360K (Topic 2). Overview of historical and contemporary issues facing African American families and children. Social service delivery to African American families and communities is emphasized. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 321K, 374 (Topic 1), Social Work 360K (Topic 2), Women's and Gender Studies 340 (Topic 3).

Topic 7: Black Women and the State. Same as African and African Diaspora Studies 372F (Topic 12), Anthropology 324L (Topic 78), and Latin American Studies 324L (Topic 17). Surveys black women's experiences living with and confronting state oppression around the world. Takes an historical, social, and theoretical look at the roots of this oppression and inequality, and how black women have chosen to respond to it locally and globally. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 372F (Topic: Black Women, Struggle, and the Transnational State), 372F (Topic 11), 372F (Topic 12), Anthropology 324L (Topic: Black Women, Struggle, and the Transnational State), 324L (Topic 78), Latin American Studies 324L (Topic: Black Women, Struggle, and the Transnational State), 324L (Topic 17), Women's and Gender Studies 340 (Topic: Black Women, Struggle, and the Transnational State), 340 (Topic 7), 340 (Topic 63). Additional prerequisite: Upper-division standing.

**Topic 9: Black Women in America.** Same as African and African Diaspora Studies 374D (Topic 9) and History 350R (Topic 17). Uses primary sources, historical monographs, and essays to provide a chronological and thematic overview of the experiences of black women in America from their African roots to the circumstances they face in the present era. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: Black Women in America), 374D (Topic 9), History 350L (Topic: Black Women in America), 350R (Topic 17), Women's and Gender Studies 340 (Topic: Black Women in America), 340 (Topic 9).

**Topic 10: Iranian Women Writers.** Same as Middle Eastern Languages and Cultures 321 (Topic 11) and Middle Eastern Studies 342 (Topic 11). Only one of the following may be counted: Middle Eastern Languages and Cultures 321 (Topic 11), Middle Eastern Studies 342 (Topic 11), WGS 340 (Topic 10). Additional prerequisite: Upper-division standing.

**Topic 11: Veiling in the Muslim World.** Same as Asian Studies 372 (Topic 14), Islamic Studies 372 (Topic 2), Middle Eastern Languages and Cultures 321 (Topic 22), and Religious Studies 358 (Topic 5). Only one of the following may be counted: Asian Studies 372 (Topic 14), Islamic Studies 372 (Topic 2), Middle Eastern Languages and Cultures 321 (Topic 22), Religious Studies 358 (Topic 5), Women's and Gender Studies 340 (Topic 11).

**Topic 12: Women in Modern Japanese Fiction.** Same as Asian Studies 372 (Topic 17: Women in Modern Japanese Fiction). Additional prerequisite: Upper-division standing or consent of instructor.

**Topic 13: Law and Society in Early Modern Europe.** Same as European Studies 346 (Topic 4) and History 350L (Topic 57). Research seminar on how historians have explored the significance of law, criminal and civil, in the lives of early modern Europeans. Topics include infanticide, fornication, drunkenness, theft, debt, slander, and family disputes. Only one of the following may be counted: European Studies 346 (Topic 4), History 350L (Topic 57), Women's and Gender Studies 340 (Topic 13).

**Topic 14: Self-Revelation in Women's Writing.** Same as African and African Diaspora Studies 372E (Topic 8), Comparative Literature 323 (Topic 4), and Middle Eastern Studies 342 (Topic 19). Only one of the following may be counted: African and African Diaspora Studies 372E (Topic 8), 374 (Topic 26), Comparative Literature 323 (Topic 4), English 322 (Topic: Self-Revelation in Women's Writing), Middle Eastern Studies 342 (Topic 19), Women's and Gender Studies 340 (Topic 14).

Topic 18: Women and Gender in China. Same as Asian Studies 372 (Topic 21: Women and Gender in China) and History 350L (Topic 46: Women and Gender in China).

**Topic 19: Contemporary India.** Exploration of urban and rural inequality through classic and contemporary novels, ethnographies, and films that highlight gender relations.

**Topic 20: Violence in Contemporary Mexican Culture.** Same as Latin American Studies 370S (Topic 23) and Spanish 355 (Topic 6). Studies the representation of violence in contemporary literary and cultural production in Mexico in order to understand social, political, and cultural implications of current violence there. Taught in Spanish. Only one of the following may be counted: Latin American Studies 370S (Topic 23), Spanish 350 (Topic 13), 355 (Topic 6), Women's and Gender Studies 340 (Topic 20). Additional prerequisite: Spanish 327C (or 327G) and three hours of upper-division coursework in Spanish or Spanish Civilization.

**Topic 21: Minorities and the Media**. Discussion of issues concerning minority or nondominant groups in the United States. Survey of minority communication problems, including alienation; fragmentation; media and Internet access; and criticism and feedback for minority groups based on racial/ethnic background, age, sex, disability, social or economic class, and sexual orientation. Only one of the following may be counted: Journalism 341J, Latin American Studies 322 (Topic 10: Minorities and the Media), Mexican American Studies 374 (Topic 22: Minorities and the Media), Urban Studies 354 (Topic: Minorities and the Media), Women's and Gender Studies 340 (Topic 21).

**Topic 22: Muslim Women: Past and Present I.** Same as Islamic Studies 372 (Topic 12) and Religious Studies 358 (Topic 12). Survey of the role of women in Islamic societies from the Middle Ages to the eighteenth century, with a glimpse into modern times. Only one of the following may be counted: Islamic Studies 372 (Topic 12), Religious Studies 358 (Topic: Muslim Women: Past and Present I), 358 (Topic 12) Women's and Gender Studies 340 (Topic 22). Additional prerequisite: Upper-division standing.

**Topic 23: Muslim Women: Past and Present II.** Same as Islamic Studies 372 (Topic 13) and Religious Studies 358 (Topic 13). Survey of the role of women in the modern Muslim world, with a glimpse into historical developments within Islamic societies. Only one of the following may be counted: Islamic Studies 372 (Topic 13), Religious Studies 358 (Topic: Muslim Women: Past and Present II), 358 (Topic 13), Women's and Gender Studies 340 (Topic 23). Additional prerequisite: Upper-division standing.

**Topic 25: Gender, Sexuality, and the Family in Indian Religions and Cultures.** Same as Anthropology 324L (Topic 40), Asian Studies 372 (Topic 25), and Religious Studies 341 (Topic 3). A comprehensive historical overview of gender issues as they are represented in the textual traditions of South Asia.

Topic 26: American Popular Culture, 1682-Present. Same as American Studies 370 (Topic 35) and History 350R (Topic 19). Explores the evolution of American popular culture and its relationship to national consolidation, and at times, disunion, over the last 330 years. Topic 27: Islamic Law. Same as Islamic Studies 340 (Topic 5), Middle Eastern Languages and Cultures 321 (Topic 19), Middle Eastern Studies 342 (Topic 27), and Religious Studies 358 (Topic 9). Designed to give students a foundation in the substantive teachings of the shariah, which comprises not only what we normally think of as law, but also ethics and etiquette. Only one of the following may be counted: Islamic Studies 340 (Topic: Islamic Law), 340 (Topic 5), Middle Eastern Languages and Cultures 321 (Topic: Islamic Law), 321 (Topic 19), Middle Eastern Studies 342 (Topic 27), Religious Studies 358 (Topic: Islamic Law), 358 (Topic 9), Women's and Gender Studies 340 (Topic: Islamic Law), 340 (Topic 27).

**Topic 28: Gender and Sexuality in Japan**. Same as Asian Studies 372 (Topic 30) and History 364G (Topic 10). Examines gender and sexuality in Japan during the classical (Heian), early modern (Tokugawa or Edo), and modern periods. Considers the construction and representation of feminine and masculine gender and sexuality, both normative and otherwise. Only one of the following may be counted: Asian Studies 372 (Topic: Gender and Sexuality in Japan), 372 (Topic 30), History 364G (Topic: Gender and Sexuality in Japan), 364G (Topic 10), Women's and Gender Studies 340 (Topic: Gender and Sexuality in Japan), Sexuality in Japan), 340 (Topic 28).

Topic 29: Contemporary African American Women's Fiction. Same as African and African Diaspora Studies 372E (Topic 15) and English 376M (Topic 7). Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Contemporary African American Women's Fiction), 372E (Topic 15), English 376M (Topic: Contemporary African American Women's Fiction), 376M (Topic 7), Women's and Gender Studies 340 (Topic: Contemporary African American Women's Fiction), 340 (Topic 29). Additional prerequisite: Nine semester hours of coursework in English or rhetoric and writing. Topic 30: Goddesses in World Religions and Cultures. Same as Asian Studies 340 (Topic 7) and Religious Studies 373 (Topic 3). Historical and cross-cultural overview of the relationship between feminine and religious cultural expressions through comparative examinations and analyses of various goddess figures in world religions. Only one of the following may be counted: Anthropology 324L (Topic: Goddesses in World Religions and Cultures), Asian Studies 340 (Topic 7), Religious Studies 373 (Topic: Goddesses in World Religions and Cultures), 373 (Topic 3), Women's and Gender Studies 340 (Topic: Goddesses in World Religions and Cultures), 340 (Topic 30). Additional prerequisite: Upper-division standing.

**Topic 31: Writing Slavery.** Same as African and African Diaspora Studies 374F (Topic 6) and English 376M (Topic 3). Explores the controversial rewriting of slavery in a presentist context by contemporary authors. Addresses challenges that archival limitations and revisionist writings about slavery pose for academic disciplines, literary instruction, and/or pedagogy. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Writing Slavery), 374F (Topic 6), English 376M (Topic: Writing Slavery), 376M (Topic 3), Women's and Gender 340 (Topic: Writing Slavery), 340 (Topic 31). Additional prerequisite: For English majors, nine semester hours of coursework in English or rhetoric and writing; for others, upper-division standing.

**Topic 32: African Women's History.** Same as African and African Diaspora Studies 372G (Topic 6) and History 364G (Topic 5). Major themes include politics, economics, religion, the family, culture, technology, feminism, colonialism, nationalism, and development in relation to the lives of African women. Only one of the followed may be counted: African and African Diaspora Studies 372G (Topic 6), 374C (Topic: African Women's History), History 364G (Topic: African Women's History), 364G (Topic 5), Women's and Gender Studies 340 (Topic: African Women's History), 340 (Topic 32).

**Topic 33: Antebellum Slavery.** Same as African and African Diaspora Studies 374D (Topic 16) and History 365G (Topic 6). Examination of slavery at its maturity during the nineteenth century. Only one of the following may be counted: African and African Diaspora Studies 374D (Topic: Antebellum Slavery), 374D (Topic 16), History 365G (Topic: Antebellum Slavery), 365G (Topic 6), Women's and Gender Studies 340 (Topic: Antebellum Slavery), 340 (Topic 33). **Topic 34: Gender in North and West Africa.** Same as African and African Diaspora Studies 372G (Topic 5), Islamic Studies 373 (Topic 8), Middle Eastern Languages and Cultures 321 (Topic 16), and Middle Eastern Studies 342 (Topic 28). Examines gender discourses through North African and West African literary works by looking at the role(s) played by Islam and Christianity in the creation of the identities of African men and women. Includes discussion of the question of what gender is, and whether it is socially constructed. Only one of the following may be counted: African and African Diaspora Studies 372G (Topic 5), 374C (Topic: Gender in North and West Africa), Islamic Studies 372 (Topic: Gender in North and West Africa), 373 (Topic 8), Middle Eastern Languages and Cultures 321 (Topic 16), Middle Eastern Studies 342 (Topic 28), Women's and Gender Studies 340 (Topic: Gender in North and West Africa), 340 (Topic: 34). Additional prerequisite: Upper-division standing.

**Topic 35: South Asian Migration to the United States.** Same as Asian American Studies 325 (Topic 9), Asian Studies 372 (Topic 43), and History 365G (Topic 14). Examines the South Asian diaspora in the United States. Only one of the following may be counted: Asian American Studies 325 (Topic: South Asian Migration to the United States), Asian American Studies 325 (Topic 9), Asian Studies 372 (Topic: South Asian Migration to the United States), Asian American Studies 325 (Topic: South Asian Migration to the United States), History 365G (Topic: South Asian Migration to the United States), History 365G (Topic 14), Women and Gender Studies 340 (Topic: South Asian Migration to the United States), Women and Gender Studies 340 (Topic 35). Additional prerequisite: Upper-division standing.

**Topic 36: Gender and Geography.** Same as Geography 356T (Topic 11). Interrogates how norms of gender, race, and sexuality are created through and across the spaces of the body, home, nation, colony and the globe, using a feminist postcolonial lens. Only one of the following may be counted: Geography 356T (Topic: Gender and Geography), 356T (Topic 11), Women and Gender Studies 340 (Topic: Gender and Geography), 340 (Topic 36) Additional prerequisite: Upper-division standing.

**Topic 37: Tolerance in Dutch Culture.** Same as European Studies 347 (Topic 19) and German, Scandinavian, and Dutch Studies 361E. The historical roots of Dutch "tolerance" and how it plays a role in current Dutch culture and attitudes towards religious, gender, and sexual differences, as well as drug use, prostitution, and euthanasia. Exploration of the stereotypes and the actuality of these Dutch attitudes and policies from an international comparative perspective. Only one of the following may be counted: European Studies 347 (Topic: Dutch Culture: Too tolerant?), 347 (Topic 19), German, Scandinavian, and Dutch Studies 361E, Germanic Civilization 327E (Topic: Dutch Culture: Too tolerant?), 340 (Topic 37). Additional prerequisite: Upper-division standing.

**Topic 38: Afro-Caribbean Politics and Culture in Central America.** Same as African and African Diaspora Studies 326, Anthropology 324L (Topic 47), and Latin American Studies 337N. Exploration of black identity, political systems, and community activism in Central America and the Caribbean. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 326, 374E (Topic: Afro-Caribbean Politics and Culture in Central America), Anthropology 324L (Topic: Afro-Caribbean Politics and Culture in Central America), 324L (Topic: Afro-Caribbean Politics and Culture in Central America), 324L (Topic: 47), Government 365N (Topic: Afro-Caribbean Politics and Culture in Central America), Latin American Studies 337M (Topic: Afro-Caribbean Politics and Culture in Central America), 337N, Women's and Gender Studies 340 (Topic: Afro-Caribbean Politics and Culture in Central America), 340 (Topic 38). Prerequisite: Upper-division standing.

**Topic 39: History of Southern Africa.** Same as African and African Diaspora Studies 374C (Topic 4) and History 350L (Topic 72). Only one of the following may be counted: African and African Diaspora Studies

374C (Topic: History of Southern Africa), 374C (Topic 4), History 350L (Topic: History of Southern Africa), 350L (Topic 72), Women's and Gender Studies 340 (Topic: History of Southern Africa), 340 (Topic 39). **Topic 40: Historical Imagining of Africa in Films.** Same as African and African Diaspora Studies 374F (Topic 18) and History 350L (Topic 70). Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Historical Imagining of Africa in Film), 374F (Topic 18), History 350L (Topic: Historical Imagining of Africa in Film), 350L (Topic 70), Women's and Gender Studies 340 (Topic: Historical Imagining of Africa in Film), 350L (Topic 70), Women's and Gender Studies 340 (Topic: Historical Imagining of Africa in Film), 340 (Topic 40).

Topic 42: Apartheid: South African History. Same as African and African Diaspora Studies 374C (Topic 6) and History 364G (Topic 6). A study of the social, political, economic, and cultural history of South Africa to contextualize the rise of apartheid. Primarily focuses on the period since 1948 from the perspectives of women, children, and men of all racial backgrounds who lived through that particular period. Only one of the following may be counted: African and African Diaspora Studies 374C (Topic: Apartheid and Resistance in South Africa), 374C (Topic: Apartheid: South African History), 374C (Topic 6), History 364G (Topic: Apartheid: South African History), 364G (Topic: Apartheid and Resistance in South Africa), 364G (Topic 6), Women's and Gender Studies 340 (Topic: Apartheid: South African History), 340 (Topic 42). Topic 43: Black Women and Dance. Same as African and African Diaspora Studies 356E. Exploration of how black women express creativity in response to the violence of racism and sexism, and to envision new ways of being and moving in the world. Women's participation in ritual, concert, and social dance in North America, Haiti, Cuba, and Brazil will be studied through readings, viewings, and stagings. Only one of the following may be counted: African and African Diaspora Studies 356E, 372E (Topic: Black Women and Dance), Theatre and Dance 357T (Topic: Black Women and Dance), Women's and Gender Studies 340 (Topic: Black Women and Dance), 340 (Topic 43). Prerequisite: Upper-division standing.

Topic 44: Gender Politics in the Islamic World. Same as Islamic Studies 373 (Topic 11). Middle Eastern Studies 341 (Topic 7). Religious Studies 358 (Topic 8), and Sociology 336G. Study of the Islamic world and major sociological concepts such as gender, social organizations, culture, and politics. Examines how culture is mediated by politics, resulting in diverse interpretations of Islam and in different policies with respect to women's rights. Three lecture hours a week for one semester. Only one of the following may be counted: Islamic Studies 373 (Topic: Gender Politics in the Islamic World), 373 (Topic 11), Middle Eastern Studies 322K (Topic: Gender Politics in the Islamic World), 341 (Topic: Gender Politics in the Islamic World), 341 (Topic 7), Religious Studies 358 (Topic: Gender Politics in the Islamic World), 358 (Topic 8), Sociology 321K (Topic: Gender Politics in the Islamic World), 336G. Women's and Gender Studies 340 (Topic: Gender Politics in the Islamic World), 340 (Topic 44). Additional prerequisite: Upper-division standing.

**Topic 45: Feminist Interventions in Borderlands History.** Same as American Studies 370 (Topic 45) and Mexican American Studies 374 (Topic 38). Provides an in-depth understanding of the social, economic, and spatial transformations of the United States/Mexico borderlands in the nineteenth and early twentieth centuries. Only one of the following may be counted: American Studies 370 (Topic: Feminist Interventions in Borderlands History), 370 (Topic 45), Mexican American Studies 374 (Topic: Feminist Interventions in Borderlands History), 374 (Topic 38), Women's and Gender Studies 340 (Topic: Feminist Interventions in Borderlands History), 340 (Topic 45).

**Topic 46: Africana Women's Art.** Same as African and African Diaspora Studies 374F (Topic 9) and Art History 346L. Analysis of the diverse modes of presentation, mediums, definitions, and influences of Africana women artists in the diaspora. Designed to use critical theory and art history found in oral and written literatures, music,

films, and other formal and informal documents. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Africana Women's Art), 374F (Topic 9), Art History 346L, 373C (Topic: Africana Women's Art), Women's and Gender Studies 340 (Topic: Africana Women's Art), 340 (Topic 46). Prerequisite: Upper-division standing.

**Topic 47: Black Queer Literature and Film.** Same as African and African Diaspora Studies 372E (Topic 13) and English 376M (Topic 8). Analyzes written works, films, and videos by and about lesbians, bisexual, transgender, and gay black people, with an emphasis on understanding the historical and theoretical construction of sexual and gender identities and sexual/cultural practices in black communities. Only one of the following may be counted: African and African Diaspora Studies 372E (Topic: Black Queer Literature and Film), 372E (Topic 13), 374F (Topic: Black Queer Literature and Film), English 376M (Topic: Black Queer Literature and Film), Samen's and Gender Studies 340 (Topic: Black Queer Literature and Film), 340 (Topic 47). Additional prerequisite: For English majors, nine semester hours of coursework in English or rhetoric and writing; for others, upper-division standing.

**Topic 48: Diaspora Visions.** Same as African and African Diaspora Studies 374F (Topic 13) and Art History 345L. An exploration of border crossing by cultures and groups including Yorubas, Jews, Armenians, Tibetans, Hamish, Pakistanis, and Indians and the production of images by immigrants, exiles, and nomads in alien lands. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Diaspora Vision), 374F (Topic 13), Art History 345L, 373D (Topic: Diaspora Visions), 374 (Topic: Diaspora Vision), Women's and Gender Studies 340 (Topic: Diaspora Vision), 340 (Topic 48).

Topic 50: Women and the Holocaust. Same as Comparative Literature 323 (Topic 19), European Studies 346 (Topic 10), German, Scandinavian, and Dutch Studies 341F, and Jewish Studies 363 (Topic 11). Introduction to both the history of Jewish and German women during World War II and the Holocaust, and to women's narratives and self-representations of this period. Historical sources, memoirs, films, and interviews will be used as source material. Three lecture hours a week for one semester. Only one of the following may be counted: Comparative Literature 323 (Topic: Women's Narratives of the Holocaust and World War II), 323 (Topic 19), European Studies 346 (Topic: Women's Narratives of the Holocaust and World War II), 346 (Topic 10), German, Scandinavian, and Dutch Studies 341F, Germanic Civilization 323E (Topic: Women's Narratives of the Holocaust and World War II), Jewish Studies 363 (Topic 11), Women's and Gender Studies 340 (Topic: Women's Narratives of the Holocaust and World War II), 340 (Topic 50). Additional prerequisite: Upper-division standing.

Topic 51: Medieval Women Mystics. Same as European Studies 347 (Topic 18), German, Scandinavian, and Dutch Studies 361D, and Religious Studies 357 (Topic 15). The life and writings of Saint Birgitta of Sweden, fourteenth-century visionary, religious reformer, and pilgrim, examined and compared with her predecessor Hildegard of Bingen (Germany), her successor Margery Kempe (England), as well as Margery's mentor, Julian of Norwich. Social and historical contexts for all four of these women mystics will be explored in depth. Only one of the following may be counted: English 322 (Topic: Birgitta, Hildegard, and Margery), European Studies 347 (Topic: Birgitta, Hildegard, and Margery), 347 (Topic 18), German, Scandinavian, and Dutch Studies 361D, Germanic Civilization 327E (Topic 10: Birgitta, Hildegard, and Margery), Religious Studies 357 (Topic: Birgitta, Hildegard, and Margery), 357 (Topic 15), Scandinavian 373 (Topic 8: Birgitta, Hildegard, and Margery), Women's and Gender Studies 340 (Topic: Birgitta, Hildegard, and Margery), 340 (Topic 51). Additional prerequisite: Upper-division standing.

**Topic 52: Sex and Power in the African Diaspora.** Same as African and African Diaspora Studies 372G (Topic 33) and Anthropology 324L (Topic 48). Exploration of various experiences and theories of sex, intimacy, and desire alongside intellectual and artistic engagements with power hierarchies and spirituality across transnational black communities. Subjects include the concept of "erotic subjectivity" from various theoretical and methodological angles, principally within African diasporic contexts. Only one of the following may be counted: African and African Diaspora Studies 372G (Topic: Sex and Power in the African Diaspora), 372G (Topic 33), Anthropology 324L (Topic: Sex and Power in the African Diaspora), 324L (Topic 48), Women's and Gender Studies 340 (Topic: Sex and Power in the African Diaspora), 340 (Topic 52).

Topic 53: Women and Social Movements in the Twentieth-Century United States. Same as African and African Diaspora Studies 372C (Topic 7), American Studies 321 (Topic 10), and History 365G (Topic 8). Examines women's participation in well-known and lesser-known social movements during the twentieth century. Only one of the following may be counted: African and African Diaspora Studies 372C (Topic: Women and Socl Mvmnts in US), 372C (Topic 7), American Studies 321 (Topic: Women/Social Movements in US), 321 (Topic 10), History 365G (Topic: Women/Social Movements in US), 365G (Topic 8), Women's and Gender Studies 340 (Topic: Women/Socl Movements in the US, 340 (Topic 53).

**Topic 54: The Qur'an**. Same as Comparative Literature 323 (Topic 37), Core Texts and Ideas 375 (Topic 1), Islamic Studies 340 (Topic 2), Middle Eastern Languages and Cultures 321 (Topic 9), Middle Eastern Studies 342 (Topic 16), and Religious Studies 325G. The history, language, style, and themes of the Qur'an. Only one of the following may be counted: Comparative Literature 323 (Topic: The Qur'an), 323 (Topic 37), Core Texts and Ideas 375 (Topic: The Qur'an), Core Texts and Ideas 375 (Topic 1), Islamic Studies 340 (Topic 2), Middle Eastern Languages and Cultures 321 (Topic 9), Middle Eastern Studies 342 (Topic 16), Religious Studies 325G, Women's and Gender Studies 340 (Topic: The Qur'an), 340 (Topic 54). Additional prerequisite: Upperdivision standing.

**Topic 55: Women Filmmakers in the Middle East.** Same as Middle Eastern Languages and Cultures 321 (Topic 23) and Middle Eastern Studies 342 (Topic 32). Only one of the following may be counted: Middle Eastern Languages and Cultures 321 (Topic 23), Middle Eastern Studies 322K (Topic: Women Filmmakers in the Middle East), 342 (Topic 32), Turkish 372 (Topic: Women Filmmakers in the Middle East), Women's and Gender Studies 340 (Topic: Women Filmmakers in the Middle East), 340 (Topic 55). Additional prerequisite: Upper-division standing.

**Topic 56: Muslim Women in Politics.** Same as Islamic Studies 372 (Topic 23) and Religious Studies 358 (Topic 19). Only one of the following may be counted: Anthropolgy 324L (Topic: Muslim Women in Politics), Islamic Studies 372 (Topic: Muslim Women in Politics), 372 (Topic 23), Religious Studies 358 (Topic: Muslim Women in Politics), 358 (Topic 19), Women's and Gender Studies 340 (Topic: Muslim Women in Politics), 340 (Topic 56).

**Topic 57: Sacred and Ceremonial Textiles.** Same as Anthropology 324L (Topic 29), Islamic Studies 372 (Topic 11), Middle Eastern Languages and Cultures 321 (Topic 34), and Religious Studies 358 (Topic 11). Textiles and material objects indigenous to the Islamic world, and what they reveal about the culture of various Islamic societies. Only one of the following may be counted: Anthropology 324L (Topic 29), Islamic Studies 372 (Topic 11), Middle Eastern Languages and Cultures 321 (Topic: Sacred and Ceremonial Textiles), 321 (Topic 34), Middle Eastern Studies 358 (Topic: Sacred and Ceremonial Textiles), Religious Studies 358 (Topic: Sacred and Ceremonial Textiles), 358 (Topic 11), Textiles and Apparel 355 (Topic: Sacred and Ceremonial Textiles), Women's and Gender Studies 340 (Topic: Sacred and Ceremonial Textiles), 340 (Topic 57). **Topic 58: Queer Ethnographies.** Same as Anthropology 324L (Topic 45). Anthropological analysis of gender and sexuality that critically evaluates formative concepts and theories that have been subject to recent debates within anthropology, gender studies, and queer theory. Only one of the following may be counted: Anthropology 324L (Topic: Queer Ethnographies), 324L (Topic 45), Women's and Gender Studies 340 (Topic: Queer Ethnographies), 340 (Topic 58).

**Topic 59: Ancient Mediterranean Masculinities.** Same as Classical Civilization 348 (Topic 18). Examines in-depth literary and artistic evidence from multiple ancient cultures to determine how each society defined the distinctively "masculine" role it expected of men and boys and how each society transformed boys into men. Only one of the following may be counted: Classical Civilization 348 (Topic: Ancient Mediterranean Masculinities), 348 (Topic 18), Women's and Gender Studies 340 (Topic: Ancient Mediterranean Masculinities), 340 (Topic 59).

**Topic 62: Gender and Art in the Muslim World.** Same as Asian Studies 372 (Topic 46), Islamic Studies 373 (Topic 15), Middle Eastern Languages and Cultures 321 (Topic 31), Middle Eastern Studies 342 (Topic 40), and Religious Studies 358 (Topic 20). Only one of the following may be counted: Asian Studies 372 (Topic: Gender and Art in Muslim World), 372 (Topic 46), Islamic Studies 373 (Topic: Gender and Art in Muslim World), 373 (Topic 15), Middle Eastern Languages and Cultures 321 (Topic: Gender and Art in Muslim World), 373 (Topic: Gender and Art in Muslim World), 321 (Topic: 31), Middle Eastern Studies 342 (Topic: Gender and Art in Muslim World), 342 (Topic 40), Religious Studies 358 (Topic: Gender and Art in Muslim World), 358 (Topic 20), Women's and Gender Studies 340 (Topic: Gender and Art in Muslim World), 340 (Topic 62). Prerequisite: Upper-division standing.

**Topic 64: Postcolonial Women Writers.** Same as African and African Diaspora Studies 372C (Topic 15) and Comparative Literature 323 (Topic 38). Literary exploration of how postcolonial women across the world view their positions as citizens, migrants, workers, parents, activists, and artists in the new millennium. Subjects include the effects of imperialism in women's lives, western feminisms developed to address global women's needs, and what new possibilities for decolonization, feminism, and creativity remain to be explored. Only one of the following may be counted: African and African Diaspora Studies 372C (Topic: Postcolonial Women Writers), 372C (Topic 15), Comparative Literature 323 (Topic: Postcolonial Women Writers), 323 (Topic 38), English 370W (Topic: Postcolonial Women Writers), Women's and Gender Studies 340 (Topic: Postcolonial Women Writers), 340 (Topic 64).

Topic 65: Feminism and Film: Women Filmmakers in Northern and Central Europe. Same as Comparative Literature 323 (Topic 33), European Studies 347 (Topic 24), and German, Scandinavian, and Dutch Studies 331D. An introduction to the work of women filmmakers from Scandinavia, Germany, as well as to the viewing and interpretation of films in general. Three lecture hours a week for one semester. Only one of the following may be counted: Comparative Literature 323 (Topic: Women Filmmakers in Northern and Central Europe), 323 (Topic 33), European Studies 347 (Topic: Women Filmmakers in Northern and Central Europe), 347 (Topic 24), German, Scandinavian, and Dutch Studies 330 (Topic: Women Filmmakers in Northern and Central Europe), 331D, Women's and Gender Studies 340 (Topic: Women Filmmakers in Northern and Central Europe), 340 (Topic 65). Additional prerequisite: Upper-division standing. Topic 66: Holocaust Aftereffects. Same as Comparative Literature 323 (Topic 40), European Studies 346 (Topic 23), German, Scandinavian, and Dutch Studies 360 (Topic 1), Jewish Studies 365 (Topic 14), and Religious Studies 357 (Topic 18). Explores the historical, political, psychological, theological, and cultural fallout of the Holocaust, as well as literary and cinematic responses in Europe and the United States. Only one of the following may be counted: Comparative Literature 323 (Topic: Holocaust Aftereffects), 323 (Topic 40),

European Studies 346 (Topic: Holocaust Aftereffects), 346 (Topic 23), German, Scandinavian, and Dutch Studies 360 (Topic 1), Germanic Civilization 323E (Topic: Holocaust Aftereffects), Jewish Studies 365 (Topic: Holocaust Aftereffects), 365 (Topic 14), Liberal Arts Honors 350 (Topic: Holocaust Aftereffects), Religious Studies 357 (Topic: Holocaust Aftereffects), 357 (Topic 18), Women's and Gender Studies 340 (Topic: Holocaust Aftereffects), 340 (Topic 66).

Topic 67: Graffiti and Poster Art in the Islamic World. Same as Anthropology 324L (Topic 59), Islamic Studies 373 (Topic 17), Middle Eastern Languages and Cultures 321 (Topic 36), Middle Eastern Studies 342 (Topic 44), and Religious Studies 358 (Topic 21). Only one of the following may be counted: Anthropology 324L (Topic: Graffiti/Poster Art: Islam World), 324L (Topic 59), Islamic Studies 373 (Topic: Graffiti/Poster Art: Islam World), 373 (Topic 17), Middle Eastern Languages and Cultures 321 (Topic: Graffiti/Poster Art: Islam World), 321 (Topic 36), Middle Eastern Studies 342 (Topic: Graffiti/ Poster Art: Islam World), 342 (Topic 44), Religious Studies 358 (Topic: Graffiti/Poster Art: Islam World), 358 (Topic 21), Women's and Gender Studies 340 (Topic: Graffiti/Poster Art: Islam World), 340 (Topic 67). Prerequisite: Upper-division standing.

**Topic 68: Women and Wealth in South Asia.** Same as Asian Studies 372 (Topic 47) and History 350L (Topic 94). Addresses the questions surrounding poverty of South Asian women by combining legal, political and social histories of the subcontinent over four centuries. Only one of the following may be counted: Asian Studies 372 (Topic: Women and Wealth in South Asia), 372 (Topic 47), History 350L (Topic: Women and Wealth in South Asia), 350L (Topic 94), Women's and Gender Studies 340 (Topic: Women and Wealth in South Asia), 340 (Topic 68).

#### WGS 441. The Roots of Social and Economic Justice.

Four lecture hours a week for one semester. Only one of the following may be counted: Social Work 460K (Topic: Roots of Social and Economic Justice), Women's and Gender Studies 440 (Topic: Roots of Social and Economic Justice), 441. Prerequisite: Upper-division standing.

### WGS 345. Topics in Women's and Gender Studies.

Three lecture hours a week for one semester, or as required for the topic. May be repeated for credit when the topics vary. Prerequisite: Upperdivision standing; additional prerequisites vary with the topic.

#### Topic 1: Child Development.

**Topic 2: The Family.** Same as Sociology 323. The American family in historical and comparative perspective. Family history and origins; comparative family systems; social antecedents of family structure and process; family formation and dissolution; family and society; recent family changes and prospects for the future. Three lecture hours a week for one semester. Sociology 323 and Women's and Gender Studies 345 (Topic 2) may not both be counted. Additional prerequisite: Upper-division standing.

**Topic 3: Women in Sickness and Health.** Same as History 350R (Topic 18). Explores medical and biological views throughout the nineteenth and twentieth centuries of women and women's health, the social context of those views, the development of medical practices, and the treatment of illness and debility. Only one of the following may be counted: History 350L (Topic: Women in Sickness and Health), 350R (Topic 18), Women's and Gender Studies 345 (Topic 3). Additional prerequisite: Six semester hours of coursework in history. **Topic 5: Women and Sport.** Same as Kinesiology 352K (Topic 3: Women and Sport).

**Topic 7: Eighteenth-Century Women Writers.** Same as English 350M (Topic 1). Women writers in the early eighteenth-century canon. Argues for a historical perspective that demonstrates the centrality of early eighteenth-century women writers to the western canon. English 350M (Topic 1) and Women's and Gender Studies 345 (Topic 7) may

not both be counted. Additional prerequisite: For English majors, nine semester hours of coursework in English or rhetoric and writing; for others, upper-division standing.

**Topic 8: Gender-Based Discrimination**. Same as American Studies 370 (Topic 6: Gender-Based Discrimination) and Government 357M (Topic 1: Gender-Based Discrimination). Studies the substance of laws that relate to gender-based roles, and the participation of women in the legal process. Additional prerequisite: Upper-division standing, six semester hours of lower-division coursework in government, a University grade point average of at least 3.50, and consent of department received prior to registering.

**Topic 9: Women in Classical Antiquity.** Same as Classical Civilization 348 (Topic 7: Women in Classical Antiquity).

**Topic 12: Family Policy Issues.** Same as Sociology 352M (Topic 5: Family Policy Issues). Consideration of liberal, conservative, and centrist views concerning the major family policy issues facing the United States and other advanced industrial societies.

**Topic 13: Isak Dinesen/Karen Blixen.** Same as Comparative Literature 323 (Topic 14), European Studies 347 (Topic 15), and German, Scandinavian, and Dutch Studies 341G. An introduction to the twentieth-century Danish author Karen Blixen, focusing on her major themes such as gender and destiny, and examining her role as a literary figure. Only one of the following may be counted: Comparative Literature 323 (Topic: Isak Dinesen/Karen Blixen), 323 (Topic 14), European Studies 347 (Topic: Isak Dinesen/Karen Blixen), 347 (Topic 15), German, Scandinavian, and Dutch Studies 341G, Germanic Civilization 323E (Topic 1), Scandinavian 373 (Topic 6), Women's and Gender Studies 345 (Topic 13). Additional prerequisite: Upper-division standing.

Topic 14: Social Dramas of Henrik Ibsen. Same as Comparative Literature 323 (Topic 17), European Studies 347 (Topic 12), and German, Scandinavian, and Dutch Studies 341D. A detailed introduction to Ibsen's social dramas (1877-1899), emphasizing their unity as a prolonged commentary on the society of his era and the variety of its human problems. Special emphasis on subjects such as: the family and the home; the public world of reputation, work, and citizenship; the predicaments of men and women in a male-dominated society; and the motives of our interventions into the lives of others. Only one of the following may be counted: Comparative Literature 323 (Topic: Social Dramas of Henrik Ibsen), 323 (Topic 17), English 322 (Topic 17), European Studies 347 (Topic: Social Dramas of Henrik Ibsen), 347 (Topic 12), German, Scandinavian, and Dutch Studies 341D, Scandinavian 323 (Topic 2), Women's and Gender Studies 345 (Topic 14). Additional prerequisite: Upper-division standing. Topic 15: Contemporary Women Authors. Same as African and African Diaspora Studies 374F (Topic 4: Contemporary Women Authors) and English 370W (Topic 2: Contemporary Women Authors). Prerequisite: Nine semester hours of coursework in English or rhetoric and writing. Topic 17: Language and Gender. Same as English 364S. Linguistic, social, and political dimensions of gender-related speech differences. Only one of the following may be counted: English 346S, Linguistics 373 (Topic: Language and the Sexes), Women's and Gender Studies 345 (Topic 17). Prerequisite: Nine semester hours of coursework in

**Topic 21: Male-Female Communication.** Same as Communication Studies 365K. Studies of speech patterns related to the concepts of male and female, including sexism in speaking, patterns of male and female speaking, patterns of listening to males and females, speech in courtship and family, speech and sexual discrimination in careers. Prerequisite: Upper-division standing.

English or rhetoric and writing.

**Topic 23: Sociology of Education.** Same as African and African Diaspora Studies 321L and Sociology 321L. Education as a societal institution, with emphasis on the United States educational system: how the system works; the effects of the system; recent changes. Prerequisite: Upper-division standing.

**Topic 26: American Dilemmas.** Same as Sociology 336C and Urban Studies 354 (Topic 13). Examination of critical American social problems, including problems in the economic, political, and health care systems, as well as inequities based on income, gender, and race. Exploration of how these problems are a natural outgrowth of the existing social structure. Three lecture hours a week for one semester. Only one of the following may be counted: Sociology 336C, Urban Studies 354 (Topic: American Dilemmas), 354 (Topic 13), Women's and Gender Studies 345 (Topic 26). Additional prerequisite: Upper-division standing.

**Topic 27: Southern Cultures.** Same as American Studies 370 (Topic 40: Southern Cultures). Investigation of multiple, fluid, and diverse southern cultures through topics such as NASCAR, biscuits and cornbread, mega-churches, beauty pageants, jazz, country music, southern hip hop, migrant farm cultures, matzo ball soup with collards, the Trail of Tears, Gullah, Tara, Graceland, and more. Includes discussion of stereotypes and the individual truths about women, men, and southern in the context of this discussion. Prerequisite: Upper-division standing.

**Topic 28: Cult Movies and Gender Issues.** Three lecture hours and two and one-half screening hours a week for one semester. Prerequisite: Upper-division standing.

**Topic 29: Witches, Workers, and Wives.** Same as European Studies 346 (Topic 3: Witches, Workers, and Wives) and History 343W. Explores the role of families and concepts of gender as expressed in key economic, social, political, and cultural patterns in early modern Europe. Prerequisite: Upper-division standing.

**Topic 30: Gay and Lesbian Literature and Culture.** Same as English 370W (Topic 8: Gay and Lesbian Literature and Culture). Prerequisite: Nine semester hours of coursework in English or rhetoric and writing. **Topic 31: Gender and Slavery in the United States.** Same as African and African Diaspora Studies 372C (Topic 4) and History 350R (Topic 14). Examines the gendered experience of chattel slavery in the United States. Includes critical analysis of classic and contemporary texts, films, and songs that focus on slave labor, family, community, sexuality, and the economy. Only one of the following may be counted: African and African Diaspora Studies 372C (Topic 4), 374D (Topic: Gender and Slavery in the United States), History 350L (Topic: Gender and Slavery in the United States), 350R (Topic 14), Women's and Gender Studies 340 (Topic: Gender and Slavery in the United States), 345 (Topic 31).

**Topic 32: Women in the History of Political Thought.** Same as Core Texts and Ideas 335 (Topic 5) and Government 335M (Topic 17). Examines the themes of women, the family, and the private sphere in the history of political theory. Only one of the following may be counted: Core Texts and Ideas 335 (Topic: Women in Hist of Polit Thought), 335 (Topic 5), Government 335M (Topic: Women in History of Political Thought), 335M (Topic 17), Women's and Gender Studies 345 (Topic: Women in History of Political Thought), 345 (Topic 32). Additional prerequisite: Upper-division standing and six semester hours of lower-division coursework in government.

**Topic 33: The History of Witchcraft.** Study of the prosecution of people, most of them women, for the crime of witchcraft in Europe and colonial America between 1450 and 1750. Prerequisite: Upper-division standing.

**Topic 34: Leadership in America.** Same as American Studies 370 (Topic 10: Leadership in America) and Government 370L (Topic 2: Leadership in America). Introduction to the concepts of leadership and the application of those concepts in public and political leadership. Additional prerequisite: Upper-division standing, six semester hours of lower-division coursework in government, a University grade point average of at least 3.50, and consent of department received prior to registering.

**Topic 35: Psychosocial Issues in Women's Health.** Same as Health Education 361. Explores psychosocial issues in women's physical and

mental health, including traditional reproductive issues, disorders that are more common in women than in men, and the leading causes of death in women. Covers gender influences on health risk behaviors, and societal influences on women's health through a consideration of social norms and roles. Three lecture hours a week for one semester. Only one of the following may be counted: Health Education 352K (Topic 2: Psychosocial Issues in Women's Health), 361, Women's and Gender Studies 345 (Topic 35). Additional prerequisite: Upper-division standing.

**Topic 36: Feminist Media Theory.** Survey of basic theories related to the structure and process of film and video communication. Three lecture hours and two and one-half screening hours a week for one semester.

**Topic 37: Women in Postwar America**. Same as American Studies 370 (Topic 30) and History 350R (Topic 8). Only one of the following may be counted: American Studies 370 (Topic 30), History 350R (Topic 8), Women's and Gender Studies 345 (Topic 37).

**Topic 38: History of Sexuality in America.** Same as History 350R (Topic 13). History 350R (Topic 13) and Women's and Gender Studies 345 (Topic 38) may not both be counted. Additional prerequisite: Six semester hours of coursework in history.

**Topic 39: Gender, Sexuality, and Migration.** Same as English 370W (Topic 9: Gender, Sexuality, and Migration). Only one of the following may be counted: Asian American Studies 320 (Topic: Gender, Sexuality, and Migration), English 370W (Topic 9), 370W (Topic: Cultures of Immigration and Dislocation), Women's and Gender Studies 345 (Topic 39). Prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

**Topic 40: Virginia Woolf.** Same as English 349S (Topic 8). Examines critical and fictional works of Virginia Woolf and the author's continuing legacy and influence. Explores the value and limitations of high modernism; English literary heritage and tradition; feminism; creative and critical definitions of gender and sexuality; intellectual activism, including Woolf's critiques of patriarchy, war, and fascism; and Woolf and imperialism and colonialism. English 349S (Topic 8) and Women's and Gender Studies 345 (Topic 40) may not both be counted. Additional prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

**Topic 41: American Food.** Same as American Studies 370 (Topic 26: American Food). Studies diverse American food cultures from a humanities perspective, exploring connections between global, national, and local communities. Uses scholarship in the field of food studies as well as cookbooks, novels, poetry, photographs, songs, documentaries, and oral histories to investigate the past and present of American food communities. Prerequisite: Upper-division standing. **Topic 42: Nature and Gender in America.** Same as American Studies 370 (Topic 27: Nature and Gender in America). Study of the connections between nature and gender in American national narratives. Explores how Americans of differing classes, races, genders, sexual orientations, and ages have shaped and experienced changing ideas of America, wilderness, domestication, and society over time and in different regions of the country. Prerequisite: Upper-division standing.

Topic 43: Animals and American Culture. Same as American Studies 370 (Topic 28) and History 350R (Topic 9). Explores the role of animals in American history, culture, and society. Only one of the following may be counted: American Studies 370 (Topic 28), History 350R (Topic 9), Women's and Gender Studies 345 (Topic 43). Topic 44: Women Radicals and Reformers. Same as American Studies 370 (Topic 29: Women Radicals and Reformers). Traces traditions of women's radical activism and reform beginning with the Enlightenment and the American Revolution and continuing to the present, with concentration on the twentieth century. Prerequisite: Upper-division standing. **Topic 45: Comparative Cultures of Beauty.** Same as American Studies 370 (Topic 24: Comparative Cultures of Beauty) and Asian American Studies 320 (Topic 2: Comparative Cultures of Beauty). Examines fashion and beauty as discourses and cultural practices affecting identity, body politics, race, gender, sexuality, and class. Additional prerequisite: Upper-division standing.

**Topic 46: Toni Morrison.** Same as African and African Diaspora Studies 372E (Topic 1) and English 349S (Topic 5). An examination of select novels by the Nobel Laureate and Pulitzer Prize-winning novelist focuses on the positional uniqueness that womanism shares with a predominant feminism, which surfaces in historicized familial relationships. Only one of the following may be counted: African and African Diaspora Studies 374F (Topic: Toni Morrison), 372E (Topic 1), English 349S (Topic 5), Women's and Gender Studies 340 (Topic: Toni Morrison), 345 (Topic 46). Additional prerequisite: Nine semester hours of coursework in English or rhetoric and writing.

**Topic 47: The Face of Justice.** Same as Government 357M (Topic 11). Examination of the inalienable rights: liberty, due process, equality, speech, assembly, security in the home, and practice or nonpractice of religion. Historical overview of women's rights and women's participation in the justice system. Discussion of individuals whose rights are being protected, and those whose rights are being overlooked by the American judicial system. Only one of the following may be counted: Government 357M (Topic: Face of Justice), 357M (Topic 11), Liberal Arts Honors 350 (Topic: Face of Justice), Women's and Gender Studies 345 (Topic: Face of Justice), 345 (Topic 47). Prerequisite: For government majors, six semester hours of lower-division coursework in government; for others, upper-division standing.

**Topic 48: Women's Autobiographical Writing.** Same as English 370W (Topic 11). Examines the autobiographical impulse in women's writing by exploring the concept of the individualistic self versus the sense of self as a part of community and duty, and the way in which that communal self can both partake of humankind and participate in self-actualization. Only one of the following may be counted: English 370W (Topic: Women's Autobiographical Writing), 370W (Topic 11), Women's and Gender Studies 345 (Topic: Women's Autobiographical Writing), 345 (Topic 48). Additional prerequisite: For English majors, nine semester hours of coursework in English or rhetoric and writing; for others, upper-division standing.

Topic 49: History of American Feminism. Same as History 350R (Topic 20). Only one of the following may be counted: History 350R (Topic: History of American Feminism), 350R (Topic 20), Women's and Gender Studies 345 (Topic: History of American Feminism), 345 (Topic 49). Topic 52: American Literary Masculinities. Same as English 370W (Topic 12). Explores constructions of masculinity in American literature from a generally, but not exclusively, feminist perspective. Subjects include what masculinity has meant at different times in United States history, and how it has varied in meaning and significance according to broad categories of identity such as social class, race, region, and queerness. Only one of the following may be counted: English 370W (Topic: American Literary Masculinities), 370W (Topic 12), Women's and Gender Studies 345 (Topic: American Literary Masculinities), 345 (Topic 52). Additional prerequisite: For English majors, nine semester hours of coursework in English or rhetoric and writing; for others, upper-division standing.

**Topic 53: Gender and Sexuality in Ancient Novel.** Same as Classical Civilization 348 (Topic 13). The major works of prose fiction from Greco-Roman antiquity and how those works relate to the intellectual, cultural, and social currents of late antiquity. Only one of the following may be counted: Classical Civilization 348 (Topic: Gender and Sexuality in Ancient Novel), 348 (Topic 13), Women's and Gender Studies 345 (Topic: Gender and Sexuality in Ancient Novel), 345 (Topic 53). **Topic 56: Gender And Sexuality in Performance.** Same as Theatre and Dance 357T (Topic 2). Only one of the following may be counted: Theater and Dance 357T (Topic: Gender And Sexuality in Performance), 357T (Topic 2), Women's and Gender Studies 345 (Topic: Gender And Sexuality in Performance), 345 (Topic 56). Additional prerequisite: Upper-division standing and consent of instructor.

### WGS 350. Feminist Theory.

Restricted to women's and gender studies majors and minors. Feminist theory with selections from women's and gender studies scholars. Recommended feminist theory course for women's and gender studies majors. Three lecture hours a week for one semester. Prerequisite: Upperdivision standing and nine semester hours of coursework in women's and gender studies.

#### WGS 356. Introduction to Feminist Research Methods.

Restricted to women's and gender studies majors and minors. Introduction to feminist research methods across a range of traditional disciplines. Designed to prepare students to analyze research within gender studies and to develop their own research skills. Three lecture hours a week for one semester. Prerequisite: Upper-division standing, and six semester hours of coursework in women's and gender studies.

#### WGS 358Q. Supervised Research.

Supervised individual research on an issue in women's and gender studies. Individual instruction. Prerequisite: Upper-division standing, Women's and Gender Studies 356 with grade of at least C-, and written consent of the supervising faculty member; consent forms are available in the Center for Women's and Gender Studies.

# WGS 360. Research and Thesis in Women's and Gender Studies.

Restricted to women's and gender studies majors. Individual project or paper to be completed under the direction of a women's and gender studies faculty member. Conference course. Offered on the letter-grade basis only. Prerequisite: Upper-division standing; Women's and Gender Studies 356 with grade of at least C-; credit or registration for Women's and Gender Studies 358Q; and written consent of the supervising faculty member on a consent form available in the Center for Women's and Gender Studies for that purpose.

### WGS 466. Guidance in Adult-Child Relationships.

Same as Human Development and Family Sciences 466. Theory and implementation of positive child and adult interactions, communication, and guidance strategies. Two lecture hours and four laboratory hours a week for one semester. Only one of the following may be counted: Human Development and Family Sciences 466, Women's and Gender Studies 345 (Topic 4: Guidance in Adult-Child Relationships), 466. Prerequisite: Human Development and Family Sciences 313 or 313H, 113L, and three semester hours of upper-division coursework in human development and family sciences, education, psychology, or sociology, with a grade of at least C- in each.

### WGS 679H. Honors Tutorial Course.

Restricted to honors candidates majoring in women's and gender studies. Individual reading of selected works for one semester, followed in the second semester by the writing of an honors thesis. The equivalent of three lectures hours a week for two semesters. Prerequisite: For 679HA, twelve semester hours of coursework in women's and gender studies and consent of supervising faculty; for 679HB, Women's and Gender Studies 679HA.

### WGS 379L. Internship in Women's and Gender Studies.

Experience working in the community or for a nonprofit agency. Ten to fifteen hours of work a week for one semester. Prerequisite: At least twelve semester hours of coursework in women's and gender studies and written consent of the supervising faculty member; consent forms are available in the Center for Women's and Gender Studies.

### WGS 379S. Senior Seminar.

Intensive study of selected topics in women's and gender studies. Three lecture hours a week for one semester. May not be repeated for credit. Offered on the letter-grade basis only. Prerequisite: Upperdivision standing and completion of at least ninety semester hours of coursework, including six hours in women's and gender studies.

# College of Natural Sciences

Paul Goldbart, PhD, Dean

David Vanden Bout, PhD, Associate Dean, Undergraduate Education Dean R. Appling, PhD, Associate Dean, Research and Facilities Nataša Pavlović, PhD, Associate Dean, Faculty Affairs Daniel F. Knopf, PHD, Associate Dean, Graduate Education Melissa Taylor, PhD, Assistant Dean, Strategy and Planning Jennifer Moon, PhD, Assistant Dean, Non-tenure Track Faculty Ricardo Medina, MBA CPA, Assistant Dean, Business Services Susan C. Harkins, EdD, Assistant Dean, Texas Interdisciplinary Plan Michael W. Raney, PhD, Assistant Dean, Student Affairs and First-Year Initiatives http://cns.utexas.edu/

# **General Information**

# Arts and Sciences Education

The academic program offered cooperatively by the College of Natural Sciences and the College of Liberal Arts provides what is sometimes referred to as a "liberal arts" or an "arts and sciences" education. No matter what area of knowledge a student intends to specialize in, the program of study will require courses in both colleges. The colleges work together to ensure that the individual interests and needs of the students pursuing an arts and sciences program are met.

Guidelines for developing a coherent plan of study are provided by major requirements, by sequential prerequisites, and by optional patterns of emphasis. Departmental majors, areas of specialization, and interdepartmental programs are designed to enable every student to study at least one field in depth. These programs are sufficiently broad in scope to allow students in the same major to develop quite different plans of study in pursuit of their individual interests and goals. Each student should choose courses that are intellectually challenging and that contribute to his or her long-term objectives.

Arts and sciences students are required to take a certain number of courses in the natural sciences, the social and behavioral sciences, and the humanities. Consequently, whatever their fields of study, they have the opportunity to learn something about the basic differences in the ways questions are raised and answered in several fields of inquiry, and about the techniques for validating the answers and putting the results to use. At the same time, they may gain some of the philosophical and historical perspectives that illuminate and give form to general or specialized knowledge and help to reveal its relevance.

Both teachers and students sometimes make the assumption that independent and creative study is exclusively for the gifted. In fact, the primary requirement is that the student be highly motivated, although he or she must also demonstrate ability. The departments that make up the two arts and sciences colleges encourage all qualified students to work independently in special honors courses and seminars and in conference, studio, or laboratory work. The student is free to define a major, to determine whether a given assignment will be an adventure or a chore, free to develop its latent possibilities or merely satisfy its explicit demands. True creativity presupposes more than a gift for innovation; it requires an unceasing commitment to thinking and working at one's highest level.

As competence is gained in a chosen field, the mind should be progressively sharpened, disciplined, and enriched. The student who leaves arts and sciences studies with an enhanced understanding of self and humankind, of cultural and historical heritage, of the world and the universe, and of the moral values that make it possible to live a meaningful life, will have made the most of education, having gained something over and above the objective of vocational preparedness.

# Financial Assistance Available through the College

A number of scholarship funds established by individuals, foundations, and industrial or research organizations are available to students in the college. Awards are made for reasons ranging from academic promise to financial need. More information about scholarships is given at http:// cns.utexas.edu/honors/scholarships/scholarship-policies.

# **Student Services**

# Academic Advising

Academic advising is a responsibility shared by advisers and students. Advisers help students clarify their values and goals, assist with the selection of courses, and monitor and evaluate students' progress toward their degrees. Each student is assigned an academic adviser in his or her proposed field of study; students are expected to communicate with their advisers before registration each semester.

# **Career Services**

Career Services is a multidisciplinary hub for students to explore the next phase of their professional or educational career. Additional information is given on the Career Services website (https://cns.utexas.edu/careerservices).

# **Study Abroad**

Students are encouraged to incorporate an international experience into their course of study. In addition to the traditional study abroad programs, students may take advantage of programs specifically designed for science study, including faculty-led courses, Maymester courses, and research abroad. The Texas Institute for Discovery Education in Sciences (TIDES) provides information sessions, one-onone advising, and resources for science students interested in these programs.

# **Student Programs**

The College of Natural Sciences offers additional programs to supplement the degree plans. Additional information is given at https:// cns.utexas.edu/student-communities.

# **Biology Scholars Program**

The Biology Scholars Program (BSP) is designed to provide lowerdivision biochemistry and biology students with a broader understanding of the study of biology and a strong sense of community as they begin their academic careers. Throughout the two-year program, BSP provides academic support, resources for peer-led study, and community service opportunities. Each semester, BSP students take a specialized critical thinking seminar on topics that range from the study of biological sciences to graduate and professional careers in biology. These classes emphasize working in small groups and help BSP students develop strong problem-solving and study skills.

### **Cornerstones Program**

All entering Natural Sciences majors, freshman or transfer, are eligible for participation in the Cornerstones Program. The guiding principles for students are to connect, acclimate, navigate, and explore. Each entering freshman joins a small learning community led by a faculty or staff adviser and a peer mentor. The key components of Cornerstones are creating small learning communities, gaining tools to succeed in college, learning about majors, and developing skills and experiences to launch successful careers upon graduation. Transfer students are given the option to join the program. More information is available at https:// cns.utexas.edu/student-communities/cns-cornerstones-communities.

### Freshman Research Initiative

The Freshman Research Initiative in the Texas Institute for Discovery Education in Science (TIDES) introduces undergraduate students to the world of scientific research at the beginning of their academic careers by integrating a three-semester research experience into coursework required for the degree. All students begin with an introductory research methods course in the first semester, followed by two semesters of work on real, cutting-edge research projects in fields like biology, biochemistry, nanotechnology, molecular biology, astronomy, physics, mathematics, and computer science. After finishing the course sequence, interested students are assisted in joining faculty or other research laboratories for further work.

### **Texas Interdisciplinary Plan**

The Texas Interdisciplinary Plan (TIP) transforms the learning experience for its scholars by creating small academic communities that promote academic excellence and leadership. TIP offers students who have excelled in high school and are enrolled in the College of Natural Sciences a unique opportunity to continue their academic excellence through managed courses, mentoring, collaborative study, dedicated professional academic advising, and academic and social connections. More information is available from the TIP office and at https:// cns.utexas.edu.

### **Undergraduate Research**

One advantage that the University offers undergraduates is the opportunity to participate in state-of-the-art research with some of the world's most respected scientists. Each department in the College of Natural Sciences supports undergraduate research programs in which students may earn University credit. Students may also earn special departmental honors for exceptional research. The college holds an annual Undergraduate Research Forum to recognize and reward students who participate in research. Additional opportunities vary from department to department; information is available in the Office for Honors, Research, and International Study.

### **UTeach-Natural Sciences**

UTeach-Natural Sciences is an innovative teacher preparation program that allows students to pursue middle school and secondary teacher certification within a four-year mathematics, science, or computer science degree program. While learning the subject matter of their majors, students also learn how to teach. Upon completing the program, students graduate with a bachelor's degree and are recommended for a middle school or secondary teaching certificate. The UTeach-Natural Sciences program invites students to explore their interest in teaching as early as the freshman year. Through courses taught by some of Texas's most respected secondary math and science teachers, students learn quickly whether they are suited to the profession. More information about teacher certification requirements is given in the UTeach Natural Sciences Secondary Teaching Option Certificate (p. 685) and UTeach Teacher Certification section (p. 649) of this catalog. See Preparation for Teacher Certification (p. 16) for additional information.

### Women in Natural Sciences

The Women in Natural Sciences (WINS) Honors Residential Program is designed to promote the involvement and success of women in the sciences. Students live together in an honors dormitory during their first year and participate in socially and educationally enriching activities. In their first semester they take an innovative small seminar class in which they are introduced to faculty members in their areas of interest. Through the seminar and a wide range of academic, cultural, and social events, WINS students are connected with other students and faculty members who share their interest in science.

# **Admission and Registration**

# **Admission Policies of the College**

Admission and readmission of undergraduate students to the University is the responsibility of the director of admissions. Information about admission to the University is given in *General Information* (http:// catalog.utexas.edu/general-information/admission/undergraduate-admission).

Freshman and transfer students wishing to enter the College of Natural Sciences must apply for admission with the Office of Admissions. The College of Natural Sciences works jointly with the Office of Admissions to identify applicants who have demonstrated preparation and interest in mathematics and sciences. A student must be admitted to the college to pursue a degree program described in this section. A student who is denied admission to the college may seek to enter another college or school.

# **Freshman Admission**

Applicants should be prepared to make the necessary placements scores on the placement exams for calculus or statistics upon admission into the college. Mathematics, in the form of calculus or statistics, is required for all natural sciences degrees. To enroll in a calculus or statistics course in college, students must first take the mathematics placement exam. Information about scores necessary for placement are posted by the Student Division (http://cns.utexas.edu/students/incomingstudents/assessments).

# The Entry-Level Major

All new freshman and transfer students are admitted into the College of Natural Sciences in an entry-level major. After completing a specified set of entry-level mathematics and science courses required for the degree with a grade of at least *C*- in each course, students are admitted to the major and option they plan to pursue unless the major or option has special admission-to-major requirements. The computer science entrylevel major is restricted to students who are admitted to that major by the Office of Admissions.

Students admitted into the College of Natural Sciences through freshman admission or external transfer may change from one entrylevel major into the other, with the exception of the computer science and neuroscience entry-level majors. The computer science and neuroscience entry-level majors are restricted to students who are admitted by the Office of Admissions or through internal transfer.

# **Internal Transfer**

Students enrolled in other colleges or schools at the University may apply by April 15 to be considered for admission into an entry-level major in the following fall semester. If April 15 falls on a weekend or an official university holiday, the application is due on the next business day.

Admission to the college is limited and competitive. To be competitive, students should:

- 1. Complete a minimum of 24 semester hours in residence
- 2. Achieve a grade point average of at least 3.00 in residence

- Complete one of the following courses in residence with a grade of at least B-: Mathematics 408C, 408D, 408K, 408L, 408M, 408N, 408S, or Statistics and Data Sciences 302.
- Complete two of the following courses in residence with grades of at least B-: Biology 311C, Chemistry 301, 302, Physics 303K, and 303L, or majors level equivalents.
- 5. Submit an essay describing how the intended major would impact achievement of the educational and career goals.

Students admitted through internal transfer who wish to change to a different major in the college must apply through internal transfer and be accepted in order to change majors. Public Health entry-level majors admitted through internal transfer who are not admitted to the Bachelor of Science in Public Health degree during its admission process may transfer into any Natural Sciences entry-level major other than computer science and neuroscience.

# **External Transfer**

Students enrolled at other universities who wish to enter the College of Natural Sciences must apply for transfer admission through the Office of Admissions. Students must meet transfer admission deadlines and requirements.

The college seeks applicants with excellent past performance in mathematics and science courses. Admission to the college is limited and competitive, and varies each year based on the applicant pool. Meeting all of the following criteria does not guarantee admission, and failing to meet all criteria does not eliminate applicants from consideration. All students are welcome to apply. To be competitive, it is recommended that students:

- 1. Complete or be in progress to complete a minimum of 30 transferable semester hours when submitting the application;
- 2. Achieve a grade point average of at least 3.25;
- 3. Complete a calculus course with a grade of at least B-;
- Complete a minimum of nine semester hours in first year mathematics and science coursework with grades of A and B, including, for example, any combination of biology, chemistry, mathematics, and physics;
- 5. Utilize all aspects of the admissions application, including essays, resume, and optional letters of recommendation to express interest in the intended academic and career path in the sciences.

Students who apply to the College of Natural Sciences with fewer than 30 transferable hours completed will be considered on a space-available basis after the 30 hours are complete.

The University of Texas prioritizes transfer students who have completed fewer than 70 semester hours and who are able to remain on track to complete a degree in four years, including time spent at previous institutions.

Statistics regarding past admissions cycles are available at cns.utexas.edu/students/future/external-transfer#transfer-statistics.

### Adding a Simultaneous Major or Changing Majors

Students interested in declaring a simultaneous major must first discuss the impact of the simultaneous major on their progress toward degree and develop a timely graduation plan with their academic advisers. Students eligible to pursue a simultaneous major must follow the application procedure and meet admission requirements that have been established for the simultaneous major. At minimum, students must complete 30 semester hours of coursework in residence at the University. Students interested in changing majors must meet the entrylevel or admission requirements of the major they wish to enter. Students admitted through internal transfer may not add a simultaneous major in the College of Natural Sciences unless they are admitted into the simultaneous major through internal transfer.

### Admission-to-Major Requirements The Major in Computer Science

Several programs are available to undergraduates who wish to major in computer science. Each program involves an admission process in addition to the student's application for admission to the University. All students may apply to the University as entry-level computer science majors and later seek admission to one of the computer science programs as described in this section; those seeking admission to the Turing Scholars program may also apply to that program when they apply for admission to the University.

Admission requirements for the Bachelor of Arts with a major in computer science, the Bachelor of Science and Arts with a major in computer science, the Bachelor of Science in Computer Science, Option I, and the Integrated Program are given below. Those for the Bachelor of Science in Computer Science, Option II, Turing Scholars Honors, and Option III, Computer Science Honors, are given in Academic Policies and Procedures (p. 644).

### Bachelor of Arts; the Bachelor of Science and Arts; and the Bachelor of Science in Computer Science, Option I and V

To apply for admission to the Bachelor of Arts with a major in computer science, the Bachelor of Science and Arts with a major in computer science, or the Bachelor of Science in Computer Science, Option I and Option V degree programs, the student must earn a grade of at least *C*- in each of three entry-level courses: Computer Science 311 or 311H, Computer Science 312, and 314 or 314H. A student may attempt two of the three entry-level courses no more than twice. The third course may be attempted only once. Symbols of *CR*, *Q*, and *W* count as course attempts.

It is recommended that he or she complete all of the entry-level courses in residence at the University. However, he or she may request that transfer courses taken prior to enrollment at The University of Texas at Austin be approved as substitutes for the entry-level courses. Upon enrollment at The University of Texas at Austin, all remaining entrylevel courses must be taken in residence. The letter grades for approved transfer courses will be used in combination with entry-level courses taken in residence to calculate the grade point average required for admission to the major. He or she must earn a grade point average of at least 2.75 in the three entry-level courses taken in residence or out of residence, and a grade point average of at least 2.00 in all courses taken in residence.

A student who is not admitted to the major may submit an appeal to the department for consideration. If the appeal is approved, the student may enroll once in Computer Science 429. If the student makes a grade of at least B-, he or she will be admitted to the major to which he or she applied.

Students are evaluated after the end of each fall semester, spring semester, and summer session by the Department of Computer Science Admission Committee. Students should consult advisers in the College of Natural Sciences Department of Computer Science for information about admission to the major.

A student admitted to the major who cannot complete Computer Science 429, 439, and 331 with grades of at least a *C*- within two attempts may be removed from the major and placed into the natural sciences

undeclared major. Symbols of *CR*, *Q*, or *W* from the university count as course attempts. A third and final attempt may be granted if the student is given a non-academic drop or non-academic withdrawal during the semester in which the course is taken.

### The Integrated Program in Computer Science

The Integrated Program is a curriculum of undergraduate and graduate coursework that allows the student to earn the Bachelor of Science in Computer Science and the Master of Science in Computer Science, the Master of Science in Information Studies, or the Master of Science in Computational Science, Engineering, and Mathematics degrees at the same time. The integrated Master of Science in Computer Science includes the same coursework as the traditional master's degree program, as well as the opportunity for research. The integrated Master of Science in Information Studies allows students to choose a pathway for completing a capstone and electronic portfolio comprised of a professional experience project, a master's report, or a thesis. The integrated Master of Science in Computational Science, Engineering, and Mathematics includes the same coursework as the traditional computational sciences, engineering and mathematics master's degree program and also offers opportunity for research.

Students in the Integrated Program are expected to become leaders in the profession. Highly motivated students with the personal qualities and intellectual capacity to establish successful careers in higher education and industry are encouraged to apply.

Undergraduates typically follow Option I, II, or III for their first three years, then enter the Integrated Program in their fourth year. Admission is granted only for the fall semester; May 1st is the application deadline for those who wish to begin the program the following fall. By the end of the spring semester in which they apply, students must have completed at least 60 semester hours of coursework, including Computer Science 429 or 429H, 439 or 439H, and 331 or 331H.

Admission is based on the applicant's grade point average, letters of recommendation, statement of purpose, and SAT Reasoning Test or ACT scores, as well as other relevant examples of academic ability and leadership. An applicant with a University grade point average of less than 3.50 is unlikely to be admitted. Admission may be restricted by the availability of instructional resources. Application materials and information about deadlines are published by the Department of Computer Science, available at http://www.cs.utexas.edu/.

Before beginning the fifth year, students in the Integrated Program must be admitted to the Graduate School and the graduate program in the Department of Computer Science, the School of Information, or the Institute of Computational Science, Engineering, and Mathematics. Application forms must be completed by January 2 of the student's fourth year. Before the application deadline, students must have completed the prescribed work common to all Bachelor of Science in Computer Science Options. They must earn an acceptable score on the Graduate Record Examinations General Test (GRE) and must have their test scores reported to the University. Students usually take the GRE in the fall semester of their fourth year.

### The Coordinated Program in Dietetics

Freshman and transfer applicants to the University who plan to enter the Coordinated Program in Dietetics (CPD) should begin in the entrylevel major in nutrition. When they have met the requirements described below, students may apply for admission to the CPD.

Prior to applying for admission to the CPD, students must complete at least 60 semester hours of the coursework required for the Bachelor of Science in Nutrition, Option I, including Biology 325 or 325H, and 365S; Biochemistry 369; and Nutrition 307, 107L, 312 or 312H, 112L or 312R, 315, and 326. A list of other recommended courses is available from the School of Human Ecology. Students must have a grade point average of at least 2.70 in coursework taken in residence at the University. Students should consult advisers in the School of Human Ecology for information about the application process and deadlines. Application materials are available from the school.

The number of applicants to the CPD may exceed the number that can be adequately instructed by the faculty and accommodated within available facilities. Admission decisions are based on the student's biology, chemistry, and nutrition grade point average, his or her University grade point average, and other factors. These factors include, but are not limited to, the difficulty of the student's coursework, work or volunteer experience, leadership, commitment to the profession of dietetics, and personal interview. Students whose applications are denied may reapply.

# The Bachelor of Science in Environmental Science

### Admission to the Environmental Science Program

All freshmen and external transfer students majoring in environmental science (EVS) are first admitted to the University as entry-level EVS majors in the Jackson School of Geosciences, the College of Liberal Arts, or the College of Natural Sciences. After completing a minimum of 24 hours in residence, students may select the EVS major that best suits their long-term interests and, if necessary, transfer to the appropriate college/school in accordance with the regulations and procedures set forth in *General Information* (http://catalog.utexas.edu/general-information/registration-tuition-and-fees/transfer-from-one-division-to-another-within-the-university).

### Freshman Admission

Freshmen applicants seeking admission to the EVS major through the Jackson School of Geosciences, the College of Liberal Arts, or the College of Natural Sciences must meet the calculus readiness requirement by the official admissions application deadline. More information about the calculus readiness requirement is available through the University Admissions Office or online.

Freshmen applicants to the EVS major from all three colleges/schools are reviewed and admitted as a single cohort. Applications should use the Apply Texas online application and select the "Environmental Science, Entry-Level" major Option listed in the Jackson School of Geosciences, the College of Liberal Arts, or the College of Natural Sciences as a first-choice major. Applicants should apply to the EVS program in the college that best suits their anticipated area of focus (geological sciences, geographical sciences, or biological sciences, respectively).

### **External Transfer Admission**

Students who wish to transfer to the university from another college or university must apply to the Office of Admissions as described in *General Information* (http://catalog.utexas.edu/general-information/admission/ undergraduate-admission/#transferadmissiontext). External transfer applicants seeking admission to the Environmental Science (EVS) Degree Program through the Jackson School of Geosciences, the College of Liberal Arts, or the College of Natural Sciences must demonstrate calculus readiness by the official admissions application deadline. Details regarding transfer calculus readiness are available through the University Admissions Office or online (https://admissions.utexas.edu/ apply/calculus-readiness).

External transfer applicants to the EVS major from all three colleges/ schools are reviewed and admitted to as a single cohort. Applicants should use the Apply Texas online application and select the "Environmental Science, Entry-Level" major Option listed in the Jackson School of Geosciences, the College of Liberal Arts, or the College of Natural Sciences as a first-choice major. Applicants should apply to the EVS program in the college that best suits their anticipated area of focus (geological sciences, geographical sciences, or biological sciences, respectively).

### Internal Transfer Admission

Internal transfer, entry-level applications submitted to the EVS major through the Jackson School of Geosciences, the College of Liberal Arts, and the College of Natural Sciences are reviewed and admitted as a single cohort. All internal transfer applicants should use the online EVS Program Transfer Application and must meet requirements for internal transfer given in *General Information* (http://catalog.utexas.edu/generalinformation/registration-tuition-and-fees/transfer-from-one-division-toanother-within-the-university).

To be competitive for admission, internal transfer applicants should have a grade point average of at least 3.0 in Biology 311C, Chemistry 301, Mathematics 408C or 408N or 408K, and Geological Sciences 401 or 303.

Additional Information for all internal transfer applicants:

- Application Deadline: March 1 for entry the following academic year.
- Only currently enrolled students in good academic standing with their college of residence may apply.
- Students may apply during the semester they are completing the minimum requirements to be eligible for consideration.
- Entry-level admission to all Environmental Science majors is offered as space is available to the students who are best qualified. Decisions are based on the student's grade point average in the introductory science and math courses listed above, University grade point average, and other factors including, but not limited to, difficulty of course load, course repetitions, proven mathematical ability, and interest in the field of Environmental Science.

Students should consult with an academic adviser for additional information on the application process and deadlines.

# The Bachelor of Human Development and Family Sciences

Registration for Human Development and Family Sciences 352, 652F, 352L, 652P, and 355R is restricted to students whose practicum applications have been approved. Students who want to participate in an early childhood field experience/field practicum (Human Development and Family Sciences 352L or 652P) must also complete Human Development and Family Sciences 338 and 466 with grades of at least C-. Practicum applications are available in the School of Human Ecology advising office; application deadlines are May 1 for enrollment the following spring semester and December 1 for enrollment the following fall semester. If either May 1 or December 1 falls on a weekend or an official University holiday, the application is due the next business day.

# The Bachelor of Science in Neuroscience, Option I

Prior to applying for admission to the Bachelor of Science in Neuroscience, Option I, degree program, the student must earn a grade of at least *B*- in Neuroscience 330. Neuroscience 330 must be taken in residence. The student must also complete any of the four following courses, with grades of at least *C*-: Biology 311C, 311D, 315H, 325H; Chemistry 301, 301H, 302, 302H, and 204; Mathematics 408C, 408N, 408S; and Physics 301, 316, 303K, 303L, 317K, and 317L. To be competitive for admission, the student should have a combined grade point average of at least 3.0 in the five courses required for admission.

To apply, the student should consult advisers in the Center for First-Year Advising for information about the application process and deadlines. Applications are evaluated after the end of each fall and spring semester by the Department of Neuroscience. Students whose applications are denied may reapply twice through the supplemental admission process. Admission decisions are based on a number of factors including, but not limited to, the student's grade point average, course load difficulty, and written statement about their commitment to a future in the field of neuroscience.

### The Major in Public Health

To apply for admission to the public health degree program, the student must have earned a grade of at least *C*- in Biology 311C and 311D or 315H; Chemistry 301 or 301H and 302 or 302H; and Mathematics 408C or 408N. To be competitive for admission, the student must have a grade point average of at least 2.75 in these five courses. Students who satisfy these requirements are conditionally admitted to the major, and are registered in Public Health 317 in the following semester. Students must earn a grade of at least *B*- to be fully admitted to the major.

Applications are evaluated after the end of each fall and spring semester. Students whose applications are denied may reapply through the supplemental admission process the following semester. Admission decisions are based on the student's grade point average in the basic sequence courses, his or her University grade point average, and other factors; these factors include, but are not limited to, the difficulty of the student's course load, course repetitions, and proven mathematical ability. Students should consult advisers in the College of Natural Sciences Center for First-Year Advising for information about the application process and application deadlines.

Students who plan to follow Option II, Public Health Honors, must be admitted to the Dean's Scholars Honors Program.

To apply for admission to Option III, the student must already be admitted to Option I. The Option I student may apply for admission to Option III upon completion of the sixth semester with a grade point average of at least 3.40. The Option III student follows the admission schedule and policies of the School of Public Health at the University of Texas Health Sciences Center at Houston.

# The Bachelor of Science in Public Health, Option III

The Option I student may apply for admission to Option III upon completion of the sixth semester with a grade point average of at least 3.40. The Option III student follows the admission schedule and policies of the School of Public Health at the University of Texas Health Sciences Center at Houston.

### The Major in Textiles and Apparel Admission to the Field Experience Programs

All textiles and apparel students must complete a field experience. The internship experience facilitates learning through the blending of theory and practice. The program is a cooperative effort involving three major participants: the student, the sponsoring firm or site supervisor, and the faculty coordinator.

The primary purpose of the program is to provide students with a realistic view of their profession through actual work experience in a professional environment. Experiences in the field setting challenge the student developmentally by providing an opportunity for both cognitive

and effective learning, as well as fundamental changes in attitude, work habits, and maturity level.

Before beginning the internship, students will be expected to participate in interviews with representatives from participating sites. These interviews are designed to prepare students for a competitive marketplace. To ensure a placement that best meets the professional needs of each student, the program partners with organizations and support industries over a wide geographic area. The program director must approve all sites prior to a student's acceptance of the internship. Once a student accepts an approved internship, the placement is binding. Depending on the policy of the host site, the intern may or may not receive compensation. During the internship, the student is responsible for all assignments given by the faculty coordinator and the internship site. The interning student is also responsible for housing, relocation arrangements, and expenses.

Materials, information about deadlines, and directions for application are available from the Director of Internships in Textiles and Apparel.

# Option I: Apparel, Functional, and Technical Design

### **Application Process for Internship**

Students must apply and be admitted to the Apparel, Functional, and Technical Design Internship Program the semester before they plan to participate in their internship.

Before applying to the internship program, students must complete the following courses with a grade of at least *C*- in each: Textiles and Apparel 301, 205, 105L, 313, 214K, 214L, 316L, 164K (Topic 1: *Flat Pattern*), 264L (Topic 1: *Flat Pattern*), and 355C.

### **Internship Semester**

Textiles and Apparel 352C. Students may opt to take additional coursework during this semester.

### Option II: Merchandising and Consumer Sciences Application Process for Internship

Students must apply and be admitted to the Merchandising and Consumer Sciences Internship Program the semester before they plan to participate in their merchandising and consumer sciences internship block.

Before applying to the internship program, students must complete the following courses with a grade of at least *C*- in each: Textiles and Apparel 301, 205, 105L, 313, 214K, 214L, 316Q, 219C, 119L, 151, and 376. The merchandising and consumer sciences internship block is to be completed during the senior year, serving as the capstone experience for merchandising and consumer sciences majors.

### Internship Semester

The merchandising and consumer sciences internship block is comprised of four internship courses: Textiles and Apparel 353, 352M, 355P, and 377, as well as a placement in an approved field experience, all taken concurrently. Students may not enroll in additional coursework during the semester.

# Option IV: Textile Conservation and Museum Studies

### **Application Process for Internship**

Students must apply and be admitted to the Textile Conservation and Museum Studies Internship Program the semester before they plan to participate in their conservation internship. Before applying to the internship program, students must complete the following courses with a grade of at least *C*- in each: Textiles and Apparel 301, 205, 105L, 313, 214K, 214L, 151, 354C, 354D, 354E, 354F, 355D. The Textile Conservation and Museum Studies Internship is to be completed during the senior year, serving as the capstone experience for textile conservation and museum studies majors.

### Internship Semester

Textiles and Apparel 652C. Students may opt to take additional course work during this semester.

# Academic Policies and Procedures

### **Academic Standards**

### **Mathematics Placement**

Mathematics, in the form of calculus or statistics, is required for all natural sciences degrees. To enroll in a calculus or statistics course in the college, students must first take the mathematics placement exam. Scores necessary for placement into specific mathematics and statistics courses are posted by the Student Division (http://cns.utexas.edu/ students/incoming-students/assessments). More information about scores and course placement is available from academic advisers.

### **Repetition of a Course**

No student may enroll in any course in the College of Natural Sciences more than twice, even if the course is needed to meet degree requirements, without first obtaining the written consent of his or her major adviser and of the department that offers the course; students in colleges other than the College of Natural Sciences need only departmental approval. A symbol of *Q* or *W* counts as an enrollment unless it has been approved by the dean's office for nonacademic reasons.

A student may not repeat any course in which he or she has earned a grade of *C*- or better.

Departments in the college may have additional requirements for students who repeat courses.

### **Removal from the Major**

A Natural Sciences student whose appeal to take a course in the College of Natural Sciences for a third time and is denied may be removed from the major if the course is required for the degree.

A student who is removed from the major will be placed in the undeclared major while the student examines options to pursue another major in the College of Natural Sciences or in another college. An academic adviser will work with the student to explore opportunities for academic success and graduation.

A student who transfers the course for which a repeat appeal was denied may appeal to re-enter the major from which the student was removed. Appeals to re-enter the major are reviewed by the Associate Dean for Undergraduate Education.

### **Concurrent Enrollment**

Concurrent enrollment is enrollment simultaneously at the University and at another educational institution or in University Extension. Math and science courses may not be taken concurrently during fall and spring semesters and will not be counted toward a degree unless they are specifically approved in advance by the College of Natural Sciences. The college permits concurrent enrollment during summers without prior approval and during fall and spring semesters with certain restrictions. Students must see their academic advisers to petition for approval. No more than 30 percent of the semester hours required for any degree in the college may be completed online with University Extension.

### **Undergraduates in a Graduate Course**

The College of Natural Sciences encourages undergraduates who excel academically and would benefit from further challenges to enroll in graduate courses. With permission, undergraduates may count graduate courses toward their undergraduate degrees or may reserve them for graduate credit. To enroll in a graduate course, undergraduates must meet the University's eligibility requirements and must receive permission from the course instructor, the graduate adviser for the field in which the course is offered, and the college. Undergraduates reserving courses for graduate credit must also receive permission from the graduate dean. More information is given in Coursework in the Graduate School and the School of Law (p. 18).

### **Petitions for Degree Requirements**

Petitions for exceptions to degree requirements, other than the University-wide core curriculum, are handled through an online petition system. Academic advisers initiate petitions on the student's behalf and route them through departmental faculty advisers. The most common reason for petitioning is to request the substitution of transfer coursework for a specific degree requirement. Final decisions on all petitions are made by the dean's office. Degree requirements are very rarely waived outright.

### Honors

There are several avenues available for undergraduates to achieve honors recognition for exemplary academic ability and performance. They include: University Honors, graduation with University Honors, college-wide honors programs, departmental honors degree options, and completion of departmental honors.

The College of Natural Sciences offers Bachelor of Science and Arts and Bachelor of Science honors degree options in three programs that serve majors in the College of Natural Sciences: Dean's Scholars, Health Science Scholars, and Polymathic Scholars. Information about admission and requirements for each is available at CNS Honors & Scholarships (https://cns.utexas.edu/honors).

Honors degree options that are sponsored by departments include: Turing Scholars in Computer Science; Honors in Advanced Human Development and Family Sciences Program; and the Honors in Advanced Nutritional Sciences Program.

Lastly, students may earn departmental honors upon graduation through completion and approval of an undergraduate thesis.

### **University Honors**

University honors are earned on a semester by semester basis. Information relating to University Honors can be found in the *General Information Catalog* (http://catalog.utexas.edu/general-information/ academic-policies-and-procedures/honors/#universityhonorstext).

### **Graduation with University Honors**

The University recognizes no more than the top 20 percent of each college's May graduating class as graduating with University Honors. To be eligible, an undergraduate must have completed at least 60 semester hours of coursework in residence at the University. Graduation with University Honors is based on the average of all grades earned in courses taken in residence at the University, whether the courses were passed, failed, or repeated. Courses taken pass/fail are counted in the

sixty-hour minimum, but only letter grades (including *F* in pass/fail courses) are used to determine the grade point average.

Detailed requirements for graduation from the College of Natural Sciences with University Honors are given in the *General Information Catalog* (http://catalog.utexas.edu/general-information/academicpolicies-and-procedures/honors/#graduationwithuniversityhonorstext).

### Dean's Scholars Program

Dean's Scholars is a four-year honors degree program for highly motivated and talented students with a demonstrated interest in mathematics and/or scientific research. Students earn a Bachelor of Science degree with an honors option. This option is available in all majors offered by the College of Natural Sciences.

The key features of the program are a first-semester research methods course; a breadth requirement, usually completed during the first four semesters, that exposes students to various forms of scientific inquiry; and at least two semesters of supervised research and writing that culminate in an honors thesis.

Application to the Dean's Scholars Honors Program is separate from, and in addition to, application to the University. Application materials and information about deadlines are available in the program office and on the Dean's Scholars website (http://cns.utexas.edu/ds). Students may enter the program as freshmen or as college transfers prior to their fourth long semester of enrollment at the University.

Factors in the admission decision are the student's high school and/ or University grades, class rank, the rigor of the courses the student has taken, the quality of the required application essays, a strong recommendation from a mathematics or science instructor, and the student's interest in mathematics and/or scientific research as demonstrated by extracurricular activities.

To remain in good standing in the Dean's Scholars Honors Program, students are expected to maintain a minimum grade point average of 3.50. Students who do not may be dismissed from the program by the faculty director.

### Health Science Scholars Program

Health Science Scholars is a four-year honors degree program for exceptional students who are interested in the health professions and committed to community service. Students earn a Bachelor of Science and Arts degree with an honors major. An honors option is available in all majors offered under this degree by the College of natural Sciences.

The key features of the program are a first-semester research methods course; a six-credit-hour requirement in honors-level coursework in one or more science; a substantive health or service-related learning experience or laboratory research, undertaken in the third year; and an honors thesis based on their third-year project, written in the final year.

Application to the Health Science Scholars Program is separate from, and in addition to, application to the University. Application materials and information about deadlines are available on the Health Science Scholars website (http://cns.utexas.edu/honors/honors-programs-center/healthscience-scholars). Students may enter the program as freshmen or as college transfers prior to their fourth long semester of enrollment at the University.

Factors in the admission decision are the student's high school and/or college grades, class rank, the rigor of the courses the student has taken, the quality of the required application essays, a strong recommendation from a mathematics or science instructor, and the student's interest

in science, health and services as demonstrated by extracurricular activities.

To remain in good standing in the program, students are expected to maintain a minimum grade point average of 3.50. Students who do not may be dismissed from the program by the faculty director.

### **Polymathic Scholars Program**

Polymathic Scholars is a four-year honors degree program for exceptional science majors who have compelling interests or talents beyond the natural sciences and wish to make them part of their undergraduate degree. Students earn a Bachelor of Science and Arts degree with an honors major. An honors option is available in all majors offered under this degree by the College of Natural Sciences.

The key features of the program are a first-semester research methods course; a six-credit-hour requirement in honors-level coursework in one or more science; a multidisciplinary field of study outside the student's major, conceived and designed by the student and including no fewer than four courses; and an honors thesis on a question within that field, written in the final year.

Application to the Polymathic Scholars Program is separate from, and in addition to, application to the University. Application materials and information about deadlines are available on the Polymathic Scholars website (https://cns.utexas.edu/honors/honors-programscenter/polymathic). Students may enter the program as freshmen or as college transfers prior to their fourth long semester of enrollment at the University.

Factors in the admission decision are the student's high school and/ or college grades, class rank, the rigor of the courses the student has taken, the quality of the required application essays, a strong recommendation from a mathematics or science instructor, and the student's investment in science as well as in one or more areas beyond science, as demonstrated by extracurricular activities.

To remain in good standing in the program, students are expected to maintain a minimum grade point average of 3.50. Students who do not may be dismissed from the program by the faculty director.

### **Turing Scholars in Computer Science**

The Department of Computer Science offers a comprehensive honors degree program for highly motivated and talented students. The key features of the program are an intensive, accelerated freshman- and sophomore-year program; special Turing Scholars sections of many advanced computer science courses; a second-semester freshmanyear course that introduces students to the research activities of the department; and at least two semesters of supervised research and writing. Upon completion of both a sequence of Turing Scholars courses, approved by the program director, and an approved thesis, students graduate as Turing Scholars in Computer Science.

Students in the Turing Scholars program pursue the Bachelor of Science in Computer Science, option II. Application to the program is separate from, and in addition to, application to the University. Application materials and information about deadlines are available in the Department of Computer Science and on the Turing Scholars website (https://www.cs.utexas.edu/turing-scholars). Students may enter the program either as freshmen or after they have enrolled at the University. Factors in the admission decision are the student's high school grades and class rank, the rigor of the courses the student has taken, the quality of the required application essays, and the student's interest and aptitude in math, science, and computing as demonstrated by extracurricular activities. More information about the degree program is given in the Degrees and Programs (p. 666) section.

### Honors In Advanced Human Development and Family Sciences Program

The Department of Human Development and Family Sciences offers a comprehensive honors degree program for highly motivated and talented students. The key features of the program are a core of small, select Human Development and Family Sciences courses that expose students to the research activities of the department, and at least two semesters of supervised research and writing that culminates in an honors thesis and presentation of student research in an approved public forum. Application to the Human Development and Family Sciences Honors Program is separate from, and in addition to, application to the University. Application materials and information about deadlines are available in the Department of Human Development and Family Sciences and online (https://he.utexas.edu/hdfs). Students may enter the program as freshmen, as transfer students, or after they have enrolled at the University. Factors in the admission decision are the student's high school and/or University grades, class rank, the rigor of the courses the student has taken, faculty recommendations, standardized test scores and the student's interest and aptitude in math and science as demonstrated by relevant extracurricular activities.

More information about the degree program is given in the Degrees and Programs (p. 672) section.

### Honors In Advanced Nutritional Sciences Program

The Department of Nutritional Sciences offers a comprehensive honors degree program for highly motivated and talented students. The key features of the program are a core of select nutrition courses that expose students to the research activities of the department; and at least two semesters of supervised research and writing that culminates in an honors thesis and presentation of student research in an approved public forum. Application to the Honors in Advanced Nutritional Sciences Program is separate from, and in addition to, application to the University. Application materials and information about deadlines are available in the Department of Nutritional Sciences and online (https:// he.utexas.edu/hdfs/academics/graduate/how-to-apply). Students may enter the program as freshmen, as transfer students, or after they have enrolled at the University. Factors in the admission decision are the student's high school and/or University grades, class rank, the rigor of the courses the student has taken, the quality of the required application essays, faculty recommendations, and the student's interest and aptitude in math and science as demonstrated by relevant extracurricular activities.

More information about the degree program is given in the Degrees and Programs (p. 678) section.

# College Honors Departmental Honors

Most departments in the College of Natural Sciences offer departmental honors programs to their majors. Minimum requirements for the completion of all such programs include (1) a University grade point average of at least 3.00; (2) a three-semester-hour thesis or research project, or a reasonable equivalent, with a grade of at least *B*-; some programs may require a higher grade; (3) completion, with a grade point average of at least 3.50, of the coursework required for a major in the field in which the student seeks honors; and (4) completion at the

University of at least 60 semester hours of coursework counted toward the degree.

The statement "Special Honors in (name of field)" appears on the transcript of each graduate certified as having completed the honors program.

### **Astronomy Departmental Honors**

Majors who plan to seek special departmental honors in astronomy should apply to the honors adviser for admission to the honors program no later than the beginning of the fourth year; application by the end of the third year is recommended. A University grade point average of at least 3.00 and a combined University grade point average in physics and astronomy of at least 3.50 are required for admission.

The requirements for graduation with special departmental honors are (1) Astronomy 379H, *Honors Tutorial Course*, in which the student completes a supervised research project; the student may take a second semester of Astronomy 379H if necessary to complete the project; two semesters in this course may be counted toward the major requirement; (2) a written report and oral presentation on the research project approved by the research supervisor and the honors adviser; (3) a University grade point average of at least 3.00 and a combined University grade point average in physics and astronomy of at least 3.50; and (4) completion at the University of at least 60 semester hours of coursework counted toward the degree.

### **Biochemistry Departmental Honors**

Majors who plan to seek special departmental honors in biochemistry should apply to the departmental honors adviser for admission to the honors program no later than the beginning of the senior year. A University grade point average of at least 3.00 and a grade point average in biochemistry and chemistry of at least 3.50 are required for admission.

The requirements for graduation with special departmental honors are (1) all requirements for the degree of Bachelor of Science in Biochemistry; (2) two semesters of Biochemistry 379H, *Biochemistry Honors Tutorial Course*; (3) a thesis and a presentation based on research; the research topic and the thesis must be approved by the supervising faculty member and the departmental honors adviser; (4) a University grade point average of at least 3.00 and a grade point average in biochemistry and chemistry of at least 3.50; (5) completion at the University of at least 60 semester hours of coursework counted toward the degree; and (6) approval of the honors adviser.

### **Biology Departmental Honors**

Majors who plan to seek special departmental honors in biology should apply to the departmental honors adviser for admission to the honors program no later than the beginning of the senior year. A University grade point average of at least 3.00 and a grade point average in biology of at least 3.50 are required for admission.

The requirements for graduation with special departmental honors, which are in addition to the requirements of the major, are (1) two semesters of Biology 379H, *Honors Tutorial Course*; (2) a thesis based on original research and approved by the supervising faculty member and the honors adviser; honors students in the human biology option must select both a thesis supervisor and a second reader, one of whom must be a tenure-track faculty member or senior lecturer in the School of Biological Sciences; (3) a University grade point average of at least 3.00 and a grade point average in biology of at least 3.50; and (4) completion at the University of at least 60 semester hours of coursework counted toward the degree.

### **Chemistry Departmental Honors**

Majors who plan to seek special departmental honors in chemistry should apply to the honors adviser for admission to the honors program no later than the beginning of the senior year. A University grade point average of at least 3.00 and a grade point average in chemistry of at least 3.50 are required for admission.

The requirements for graduation with special departmental honors are (1) all requirements for the degree of Bachelor of Science in Chemistry; (2) two semesters of Chemistry 379H, *Chemistry Honors Tutorial Course*; (3) a thesis and a presentation based on research; the research topic and the thesis must be approved by the supervising faculty member and the undergraduate faculty adviser; (4) a University grade point average of at least 3.00 and a grade point average in chemistry of at least 3.50; (5) completion at the University of at least 60 semester hours of coursework counted toward the degree; and (6) approval of the honors adviser.

### **Computer Science Departmental Honors**

Students seeking special departmental honors must meet with a faculty adviser at least two semesters before they plan to graduate to discuss potential research topics and the requirements for receiving special departmental honors.

The requirements for graduation with special departmental honors are (1) Computer Science 379H, *Computer Science Honors Thesis*, with a grade of at least *B*-; (2) a University grade point average of at least 3.00 and a grade point average in computer science of at least 3.50; (3) a thesis and presentation based on research and approved by three faculty members, including the honors adviser; and (4) completion at the University of at least 60 semester hours of coursework counted toward the degree.

### Human Development and Family Sciences Departmental Honors

Majors who plan to seek special departmental honors in human development and family sciences should apply to the Departmental Honors Committee for admission to the honors program no later than the beginning of the senior year. The requirements for admission are a University grade point average of at least 3.00 and a grade point average of at least 3.50 in coursework in the School of Human Ecology that is required for the degree.

The requirements for graduation with special departmental honors are (1) all requirements for the degree of Bachelor of Science in Human Development and Family Sciences; (2) Human Development and Family Sciences 379H, *Honors Tutorial Course*; (3) completion of an honors thesis and an accompanying presentation, both of which must be approved by a committee consisting of the research supervisor and another faculty member; (4) a University grade point average of at least 3.00, a grade point average in Human Development and Family Sciences 379H of at least 3.00, and a grade point average of at least 3.50 in coursework in the School of Human Ecology that is required for the degree and for honors; and (5) completion at the University of at least 60 semester hours of coursework counted toward the degree.

### Human Ecology Departmental Honors

Majors who plan to seek special departmental honors in human ecology must follow the requirements of the departmental honors program in human development and family sciences, nutrition, or textiles and apparel.

#### **Mathematics Departmental Honors**

Majors who plan to seek special departmental honors in mathematics should apply to the honors adviser for admission to the honors program at least two semesters before their expected graduation. A University grade point average of at least 3.00 and a grade point average in mathematics of at least 3.50 are required for admission.

The requirements for graduation with special departmental honors are (1) Mathematics 379H, *Honors Tutorial Course*; (2) a thesis on the subject of the student's research or project approved in comprehensive examination by a committee consisting of at least three faculty members; (3) a University grade point average of at least 3.00 and a grade point average in mathematics of at least 3.50; and (4) completion at the University of at least 60 semester hours of coursework counted toward the degree. In order to fulfill the first requirement, students must meet the prerequisite of Mathematics 379H—Mathematics 365C, 367K, 373K, or 374G with a grade of at least A-, and another of these courses with a grade of at least B-; and consent of the honors adviser.

#### **Neuroscience Departmental Honors**

Majors who plan to seek special departmental honors in neuroscience should apply to the honors adviser for admission to the honors program no later than the beginning of their senior year. A University grade point average of at least 3.00 and a grade point average in neuroscience of at least 3.50 are required for admission.

The requirements for graduation with special departmental honors are (1) two semesters of neuroscience research coursework, including Neuroscience 379H, *Honors Tutorial Course*; (2) a thesis based on original research and approved by the supervising faculty member and the honors adviser; (3) a University grade point average of at least 3.00 and a grade point average in neuroscience of at least 3.50; and (4) completion at the University of at least 60 semester hours of coursework counted toward the degree.

#### **Nutrition Departmental Honors**

Majors who plan to seek special departmental honors in nutrition should apply to the Departmental Honors Committee for admission to the honors program no later than the beginning of the senior year. The requirements for admission are a University grade point average of at least 3.00 and a grade point average of at least 3.50 in coursework in the School of Human Ecology that is required for the degree.

The requirements for graduation with special departmental honors are (1) all requirements for the degree of Bachelor of Science in Nutrition; (2) Nutrition 379H, *Honors Tutorial Course*; this course may be repeated once for credit; (3) completion of an honors thesis and an accompanying presentation, both of which must be approved by a committee consisting of the research supervisor and another faculty member; (4) a University grade point average of at least 3.00, a grade point average in Nutrition 379H of at least 3.00, and a grade point average of at least 3.50 in coursework in the School of Human Ecology that is required for the degree and for honors; and (5) completion at the University of at least 60 semester hours of coursework counted toward the degree.

#### **Physics Departmental Honors**

Majors who plan to seek special departmental honors in physics should apply to the honors adviser for admission to the honors program near the end of the third year. A University grade point average of at least 3.00 and a grade point average in physics of at least 3.50 are required for admission.

The requirements for graduation with special departmental honors are (1) Physics 379H, *Honors Tutorial Course*; (2) a written honors thesis

approved by faculty readers assigned by the department; (3) a University grade point average of at least 3.00 and a grade point average in physics of at least 3.50; and (4) completion at the University of at least 60 semester hours of coursework counted toward the degree.

#### **Public Health Departmental Honors**

Majors who plan to seek departmental honors in public health should apply to the honors adviser for admission to the honors program no later than the beginning of the senior year. Students are encouraged to apply as early as the beginning of the junior year. A University grade point average of at least 3.00 and a grade point average in public health of at least 3.50 are required for admission.

The requirements for graduation with special departmental honors are (1) all requirements for the degree of the Bachelor of Science in Public Health; (2) two semesters of Public Health 379H, *Honors Tutorial Course*; (3) a thesis and presentation based on research and approved by the research supervisor and the honors adviser; (4) a University grade point average of at least 3.00, a grade point average in public health of at least 3.50, and grades of at least a B in Public Health 379H; and (5) completion at the University of at least 60 semester hours of coursework counted toward the degree.

#### **Textiles and Apparel Departmental Honors**

Majors who plan to seek special departmental honors in textiles and apparel should apply to the Departmental Honors Committee for admission to the honors program no later than the beginning of the senior year. The requirements for admission are a University grade point average of at least 3.00 and a grade point average of at least 3.50 in coursework in the School of Human Ecology that is required for the degree.

The requirements for graduation with special departmental honors are (1) all requirements for the degree of Bachelor of Science in Textiles and Apparel; (2) Textiles and Apparel 379H, *Honors Tutorial Course*; this course may be repeated once for credit; (3) completion of an honors thesis and an accompanying presentation, both of which must be approved by a committee consisting of the research supervisor and another faculty member; (4) a University grade point average of at least 3.00, a grade point average in Textiles and Apparel 379H of at least 3.00, and a grade point average of at least 3.50 in coursework in the School of Human Ecology that is required for the degree and for honors; and (5) completion at the University of at least 60 semester hours of coursework counted toward the degree.

## Graduation

### **Special Requirements of the College**

All students must fulfill the General Requirements (p. 20) for graduation. Students in the College of Natural Sciences must also fulfill the following requirements:

- 1. The University requires that the student complete in residence at least 60 semester hours of the coursework counted toward the degree. For the Bachelor of Arts, Plan I, and the Bachelor of Science and Arts, these 60 hours must include at least 18 hours in the major.
- 2. The University requires that at least six semester hours of advanced coursework in the major be completed in residence. Additional hours in the professional or major sequence in many cases are required by individual natural sciences degree programs.
- 3. A candidate for a degree must be registered in the College of Natural Sciences either in residence or in absentia the semester the degree is to be awarded. Graduation applications must be submitted no later than the date given in the academic calendar. The application and

supplemental in absentia instructions are available via the College of Natural Sciences website (http://cns.utexas.edu/students/degrees-majors-advising/graduation).

### **Applying for Graduation**

An electronic degree audit is created for each student each semester. The student should view the audit through IDA, the University's Interactive Degree Audit system. The degree audit tells the student the courses he or she must take and the requirements he or she must fulfill to receive the degree. The degree audit normally provides an accurate statement of requirements, but the student is responsible for knowing the requirements for the degree as stated in a catalog under which he or she is eligible to graduate and for registering so as to fulfill all these requirements. The student should speak with his or her assigned academic adviser before registering if in doubt about any requirement.

In the semester in which the degree is to be conferred, the candidate must be registered at the University and must file an online graduation application form via the graduation section of the College of Natural Sciences website (http://cns.utexas.edu/students/degrees-majorsadvising/graduation). This should be done during the first week of classes, if possible, but in no event later than the deadline to apply for an undergraduate degree; this date is given in the official academic calendar. No degree will be conferred unless the graduation application form has been filed on time.

## **Degrees and Programs**

The College of Natural Sciences offers the following undergraduate degrees:

- 1. Bachelor of Science and Arts, with majors in astronomy, biochemistry, biology, chemistry, computer science, human development and family sciences, human ecology, nutrition, mathematics, neuroscience, and physics.
- Bachelor of Science degrees in astronomy, biochemistry, biology, chemistry, computer science, environmental science, human development and family sciences, mathematics, medical laboratory science, neuroscience, nutrition, physics, public health, and textiles and apparel.
- 3. Bachelor of Arts, Plan I, with majors in astronomy, chemistry, computer science, mathematics, and physics.

The Bachelor of Science and Arts degree offers a cross-disciplinary experience for students who want to combine a strong core science experience with coursework in areas such as business, communications, fine arts, and the liberal arts. Students choose a major of up to 55 hours of science and mathematics. Students choose either a transcriptrecognized minor outside of the sciences, 15 hours in a field of study outside of sciences, or an 18 to 24 hour transcript-recognized certificate. A full list of the minor and certificate programs offered at the University can be found in The University section (p. 13) of the *Undergraduate Catalog*.

The Bachelor of Science degrees provide deep exploration of science fields for students preparing for graduate science programs and careers as specialized scientists. The degrees contain between 80 to 90 hours of science and mathematics, and typically have multiple specialized options that reflect niche areas of study.

The Bachelor of Arts, Plan I, is shared with the College of Liberal Arts.

A student may not earn more than one Bachelor of Arts, Bachelor of Science and Arts, or Bachelor of Science in Environmental Science degree from the University. A student may earn only one undergraduate degree in a particular field of study from the College of Natural Sciences. A student who holds a Bachelor of Arts or a Bachelor of Science and Arts degree from the University may earn a second major designation in another field of study that will appear on the University transcript.

The title of a graduate's degree appears on his or her diploma, but the major does not. The degree, the major, the transcript-recognized certificate, and the minor appear on the graduate's University transcript. A natural sciences student who wishes to add another major in the college must meet the criterion described in the Admission and Registration (p. 640) section.

### Applicability of Certain Courses Physical Activity Courses

Physical activity (PED) courses and Kinesiology 119 may not be counted toward a degree in the College of Natural Sciences. However, they are counted as courses for which the student is enrolled, and the grades are included in the grade point average.

#### **ROTC Courses**

ROTC units are maintained on campus by the Departments of Air Force Science, Military Science, and Naval Science. Information about each program is available from the chair of the department.

Nine semester hours of designated University of Texas at Austin coursework in air force science, military science, or naval science may be counted toward any degree in the College of Natural Sciences.

#### **Courses Taken on the Pass/Fail Basis**

No more than 16 semester hours taken on the pass/fail basis may be counted toward the Bachelor of Arts, Plan I. No more than six semester hours taken on the pass/fail basis may be counted toward the Bachelor of Science and Arts degree and the Bachelor of Science degrees. In general, only electives may be taken on the pass/fail basis. Complete rules on registration on the pass/fail basis are given in the *General Information Catalog* (http://catalog.utexas.edu/general-information/ academic-policies-and-procedures/changing-pass-fail-registration).

#### **Courses in a Single Field**

For the Bachelor of Arts, Plan I, no more than 39 hours may be counted in any one field of study, including the major, unless major requirements state otherwise. Additionally, for the Bachelor of Arts, Plan I, no more than 39 hours may be counted in any one college or school other than the College of Liberal Arts or the College of Natural Sciences.

#### **College Algebra**

Algebra courses at the level of Mathematics 301 or the equivalent may not be counted toward a degree in the College of Natural Sciences.

#### UTeach-Natural Sciences Teacher Certification

UTeach-Natural Sciences prepares students in the College of Natural Sciences, the Jackson School of Geosciences, and Cockrell School of Engineering for middle school or secondary teacher certification in Science, Technology, Engineering, and Mathematics (STEM). However, any students in any major at the University may seek STEM teacher certification through UTeach-Natural Sciences.

There are two ways students can seek STEM teacher certification through UTeach-Natural Sciences:

- 1. Students can complete the courses for certification as electives within a standard bachelor's degree program.
  - Students can obtain lists of the required content courses and additional certification requirements, which are available in the UTeach-Natural Sciences office and online (https:// austin.uteach.utexas.edu/certifications-and-degrees).
- 2. Students can consider the teaching options in biology (p. 659), chemistry (p. 662), computer science (p. 665), geological sciences (p. 345), mathematics (p. 672), and physics (p. 679) degree programs.
  - This option is strongly encouraged because these majors incorporate not only the required coursework in the major but also the professional development courses, supporting courses, and courses in other sciences that are required for teacher certification.

The courses required for all teacher certifications include a minimum of 30 field-based experience hours prior to the clinical teaching experience. All students in these field experience courses, (UTS 101, 110, EDC 365D, and 365E), which are part of the Professional Development Sequence, are observed by and received feedback from clinical faculty and inservice educators throughout the semester. Students must pass the field experience in order to pass these courses. During clinical teaching (UTS 170, EDC 651S), supervision and feedback are provided by clinical faculty, field supervisors, and the cooperating teacher.

To graduate and be recommended for teacher certification at the middle school or secondary level in the State of Texas, the student must have a University grade point average of at least 2.50. The student must have earned a grade of at least *C*- in each of the professional development courses and supporting courses listed below and must pass the final teaching portfolio review. Information about the portfolio review and additional certification requirements is available from the UTeach-Natural Sciences academic adviser.

State of Texas teacher certification requirements are governed by the Texas Education Agency and are subject to change. Students must adhere to current teacher certification requirements, even if they differ from those listed in the University catalogs.

#### **Professional Development Sequence**

All students seeking teacher certification must complete the following courses:

Requirements		Hours	
UTS 101	Secondary Teacher Education Preparation: Step 1		1
UTS 110	Secondary Teacher Education Preparation: STEP 2		1
UTS 170	Student Teaching Seminar		1
EDC 651S	Secondary School Teaching Practicum		6
EDC 365C	Knowing and Learning in Math and Science		3
EDC 365D	Classroom Interactions		3
EDC 365E	Project-Based Instruction		3

Students seeking teacher certification for middle school must also complete the following courses. To be recommended for teacher certification, the student must earn a grade of at least *C*- in each course.

Requirements		Hours	
EDC 339E	Secondary School Literacy across		3
	the Disciplines		

PSY 301	Introduction to Psychology	3-6
& PSY 304	and Introduction to Child	
	Psychology	
or EDP 350G	Adolescent Development	

#### **Supporting Courses**

<b>Requirements</b> One of the following:		Hours	
BIO 337	Selected Topics in Biology (Topic 2: Research Methods: UTeach)		3
CH 368	Advanced Topics in Chemistry (Topic 1: Research Methods: UTeach)		3
PHY 341	Selected Topics in Physics (Topic 7 Research Methods: UTeach)	:	3
One of the following:			
HIS 329U	Perspectives on Science and Mathematics		3
PHL 329U	Perspectives on Science and Mathematics		3

Interested students are encouraged to start the program at any time during their undergraduate careers. Students must be considering a teaching career in middle school or secondary science, computer science, mathematics, and/or engineering, and must meet grade point average requirements. Students who are interested in teaching earlier grades should consult the College of Education. See Preparation for Teacher Certification (p. 16) for additional information.

## Bachelor of Arts, Plan I

The requirements for the Bachelor of Arts under Plan I are designed to give each student flexibility in the selection of courses to meet individual needs.

A total of 120 semester hours is required. 36 hours must be in upperdivision courses. At least 60 hours, including 21 hours of upper-division coursework, must be completed in residence at the University; at least 24 of the last 30 hours must be completed in residence at the University. Provided residence rules are met, credit may be earned by examination, by extension, by correspondence (up to 30 percent of the hours required for the degree), or, with the approval of the dean, by work transferred from another institution. Up to 16 semester hours of classroom and/or correspondence coursework may be taken on the pass/fail basis; this coursework may be counted only as electives.

In the process of fulfilling degree requirements, all students must complete:

- 1. Core curriculum
- 2. Skills and experience flags:
  - a. Writing: two flagged courses beyond Rhetoric and Writing 306 or its equivalent, including one at the upper-division level
  - b. Quantitative reasoning: one flagged course
  - c. Global cultures: one flagged course
  - d. Cultural diversity in the United States: one flagged course
  - e. Ethics: one flagged course
  - f. Independent inquiry: one flagged course

Courses that may be used to fulfill flag requirements are identified in the Course Schedule (http://registrar.utexas.edu/schedules). They may be used simultaneously to fulfill other requirements, unless otherwise specified. Please note, students may not earn the cultural diversity in the United States and the global cultures flags from the same course. Students are encouraged to discuss options with their academic advisers.

Courses in the major and additional coursework may also be used to fulfill prescribed work requirements unless expressly prohibited. A course in one prescribed work area may not also be used to fulfill the requirements of another prescribed work area; the only exception to this rule is that a course that fulfills one requirement may also be used to fulfill a flag requirement. Courses that fulfill these flag requirements will be identified in the *Course Schedule* by the appropriate flags.

The student must fulfill both the University General Requirements (p. 20) for graduation and the Requirements of the College of Natural Sciences (p. 648). University graduation requirements include a grade point average of at least 2.00 in all courses taken at the University (including credit by examination, correspondence, and extension) for which a grade or symbol other than *Q*, *W*, *X*, or *CR* is recorded; for the Bachelor of Arts, Plan I, the student must also earn a grade point average of at least 2.00 in courses taken at the University and counted toward the major requirement. The student should also refer to the description of his or her major in the section "Majors and Additional Coursework" below, since some majors include higher minimum scholastic requirements.

More information about grades and the grade point average is given in *General Information* (http://catalog.utexas.edu/general-information/ academic-policies-and-procedures/computation-of-the-grade-pointaverage).

#### **Prescribed Work**

- 1. *Writing*: Two courses beyond Rhetoric and Writing 306 or the equivalent that carry a writing flag. One of these courses must be upper-division. Courses with a writing flag are identified in the *Course Schedule* (http://registrar.utexas.edu/schedules). They may be used simultaneously to fulfill other requirements, unless otherwise specified.
- 2. *Foreign language*: Proficiency in a language other than English is required.

The foreign language requirement is the attainment of an intermediate level of competency as determined by the completion of any one of the following options:

a. Certified proficiency on a placement or credit-by-examination test;

b. A passing grade in a language course listed in the College of Liberal Arts section (p. 372);

c. Students who wish to meet the requirement with proficiency in a language not listed in the table found in the College of Liberal Arts section above should contact the Texas Language Center.

3. *Social science*: Three semester hours chosen from a list of approved courses, in addition to the course used to fulfill the social and behavioral sciences requirement of the core curriculum. The course(s) must be in a field of study taught in the College of Liberal Arts and must be in a different field of study from the course used to fulfill the social and behavioral sciences requirement of the core.

Courses on the approved list are primarily in anthropology, economics, geography, linguistics, psychology, and sociology, but not every course in these fields is approved. Courses that are approved to count toward any core curriculum area other than social and behavioral sciences may not be counted toward this requirement. The list is available each semester in the Student Division and on the College of Liberal Arts website (http://www.utexas.edu/cola/ student-affairs/Majors-and-Degrees/Course-Lists.php).

- 4. *Mathematics*: Three semester hours in mathematics, excluding Mathematics 301, 316K, and 316L
- 5. *Natural science*: Six semester hours in natural sciences, in addition to the courses counted toward the science and technology requirements of the core curriculum. Courses used to fulfill this requirement must be chosen from the fields of study listed below; no more than three hours may be in either the history of science or the philosophy of science.

To satisfy the mathematics and science and technology requirements of the core curriculum and the natural science requirement of the Bachelor of Arts, Plan I, a student may count (1) no more than 12 hours in mathematics, computer science, and statistics and data sciences combined; and (2) no more than nine hours in any single field of study.

- a. Astronomy
- b. Biology
- c. Chemistry
- d. Geological sciences
- e. Marine science
- f. Nutrition
- g. Physical science
- h. Physics
- i. Mathematics (excluding Mathematics 301), computer science, statistics and data sciences
- j. Other alternative science courses approved by the dean
- k. Approved alternative courses in history of science and philosophy of science
- 6. *Cultural expression, human experience, and thought*: Three semester hours chosen from a list of approved courses. The course(s) must be in a field of study taught in the College of Liberal Arts. A course counted toward any requirement of the core curriculum may not also be counted toward this requirement.

A list of approved courses is available each semester in the Student Division and on the College of Liberal Arts website (http:// www.utexas.edu/cola/student-affairs/Majors-and-Degrees/Course-Lists.php).

#### **Electives**

In addition to the core curriculum, prescribed work, and major and additional coursework, the student must complete enough elective coursework to provide the 120 semester hours required for the degree. These 120 hours may include no more than 12 semester hours of bible courses; nine hours of designated coursework in air force science, military science, or naval science; 16 hours completed on the pass/fail basis; 39 hours in any one field of study offered in the College of Liberal Arts or the College of Natural Sciences, unless major requirements state otherwise; and 39 hours in any other single college or school of the University.

#### **Majors and Additional Coursework**

#### **Major Requirements**

The Bachelor of Arts, Plan I, requires the completion of all requirements for one major.

The number of semester hours required in the major varies with the field selected. Unless the requirements of the major state otherwise, a major consists of at least 24 but no more than 39 semester hours, with at least 15 hours in upper-division courses. Of these 15 hours, six must be completed in residence. At least 18 hours of coursework in the major, including six hours of upper-division coursework, must be completed in residence at the University.

#### **Additional Coursework**

Students in most majors must also fulfill the requirements of additional coursework. The requirements of the additional coursework are established by the major department and are given with the major requirements. Additional restrictions may be imposed by the academic department(s) in which the student takes the courses used to fulfill the requirements of the additional coursework; before planning to use a course to fulfill the additional coursework requirement, the student should consult the department that offers the course.

## Astronomy

#### Major

The following coursework is required:

- 1. Physics 301 and 101L
- 2. Physics 316 and 116L (Prerequisites: Physics 301 and 101L)
- 3. Physics 315 and 115L (Prerequisites: Physics 316 and 116L)
- 4. Nine semester hours of upper-division coursework in astronomy, including at least two of the following courses: Astronomy 352K, 352L, 353, 358, 364P.
- 5. Six additional upper-division hours in astronomy and/or physics

#### Additional Coursework

Completion of the following:

- Six hours of coursework (other than astronomy, lower-division physics, lower-division mathematics, and Mathematics 427J or 427K) approved by the undergraduate adviser;
- 2. Six additional hours of upper-division physics, or six hours of upperdivision coursework approved by the undergraduate adviser.

Students must earn a grade of at least *C*- in each mathematics and science course required for the degree, and a grade point average in these courses of at least 2.00.

All astronomy majors should consult the astronomy undergraduate adviser regularly about the choice of appropriate courses in both the major and the additional coursework. Qualified students are encouraged to carry out a supervised research project by taking a conference course, such as Astronomy 375 or 379H. No more than six of the hours counted toward the major requirement may be earned in conference courses.

## Chemistry

#### Major

- 1. Chemistry 301 or 301H
- 2. Chemistry 302 or 302H

- 3. Chemistry 204 or 317
- One of the following sequences:

   a. Chemistry 220C, 320M, 320N; or
   b. Chemistry 128K, 128L, 328M, and 328N
- 5. Chemistry 353
- 6. Chemistry 153K
- 7. Chemistry 354 or 354L
- 8. Chemistry 154K
- 9. Chemistry 456
- 10. Chemistry 376K

#### **Additional Coursework**

- 1. Mathematics 408C and 408D, or Mathematics 408N, 408S, and 408M
- Eight semester hours of physics chosen from one of the following sequences:
  - a. Physics 303K, 103M, 303L, and 103N
  - b. Physics 301, 101L, 316, and 116L
  - c. Physics 317K, 117M, 317L, and 117N
- 3. Completion of one of the following sequences:
  - a. Twelve semester hours of majors-level coursework in biology, mathematics, or physics. Mathematics in requirement 1 or physics in requirement 2 may count toward the 12 hour total
  - b. Computer Science 303E, 313E, and six hours chosen from Computer Science 323E, 324E, 326E, 327E, and 329E. Students choosing this option may simultaneously fulfill some of the requirements of the Elements of Computing Certificate
  - c. With written consent of the department chair and approval of the dean, 12 semester hours in a field of study outside the College of Natural Sciences

Students must earn a grade of at least *C*- in each mathematics and science course required for the degree, and a grade point average in these courses of at least 2.00.

## **Computer Science**

An undergraduate may not enroll in any computer science course more than once without written consent of an undergraduate adviser in computer science. No student may enroll in any computer science course more than twice. No student may take more than three upperdivision computer science courses in a semester without written consent of an undergraduate adviser in computer science.

#### Major

The following courses in computer science:

- 1. *Theory*: Computer Science 311 or 311H\*, 331, or 331H\*, and three additional hours from an approved list available in the department;
- 2. *Programming*: Computer Science 312, 314 or 314H\*, and three additional hours from an approved list available in the department;
- 3. *Systems*: Computer Science 429 or 429H\*, 439 or 439H\*, and three additional hours from an approved list available in the department;
- 4. Twelve additional hours of upper-division courses in computer science.

Computer Science 370 may be counted toward the degree only once.

#### Additional Coursework:

Completion of the following:

- 1. Mathematics 408C or 408N and 408S;
- Mathematics 340L or Statistics and Data Sciences 329C. Mathematics 341 may substitute for 340L;
- 3. Statistics and Data Sciences 321. Mathematics 362K may substitute for Statistics and Data Sciences 321.

Students must earn a grade of at least *C*- in each mathematics and science course required for the degree, and a grade point average in these courses of at least 2.00.

Enrollment in Computer Science 311 or 311H\*, 312, and 314 or 314H\*, is restricted to computer science entry-level majors. All other computer science courses that may be counted toward a degree in computer science are restricted to students who have been admitted to the computer science major or have the consent of the undergraduate faculty adviser.

\* Computer science courses with numbers ending in *H* are intended for students pursuing the Bachelor of Science in computer science, option II, the Turing Scholars program, and option III, computer science honors. Students outside these options may enroll in these courses only with the special consent of the honors director.

## **Mathematics**

Undergraduates seeking a Bachelor of Arts degree with a major in mathematics must choose either the standard option or the middle grades or secondary school teaching option.

### **Major: Standard Option**

At least 24 semester hours of upper-division coursework in mathematics. Students must earn a grade of at least *C*- in each mathematics and science course required for the degree, and a University grade point average in these courses of at least 2.00.

The student must complete the following:

- 1. One of the following sequences:
  - a. Mathematics 408C\* and 408D
  - b. Mathematics 408N and 408S
  - c. Mathematics 408K and 408L

\*Mathematics 408N and 408S, or 408K and 408L, may substitute for 408C;

- 2. Mathematics 340L or 341;
- 3. One course chosen from: Mathematics 325K or 328K, 343K, or 373K;
- 4. Mathematics 361K or 365C;
- 5. Mathematics 362K;
- To broaden the student's training, at least one course chosen from the following: Mathematics 333L, 339J, 339U, 343L, 343M, 344K, 348, 358K, 361, 367K, 368K, 372K, 374M, 376C, 378K;
- 7. Nine additional hours of upper-division mathematics.

#### Major: Options in Mathematics for Middle Grades and Secondary School Teaching:

At least 24 semester hours of upper-division coursework in mathematics. Students must earn a grade of at least *C*- in each mathematics and science course required for the degree, and a grade point average in these courses of at least 2.00.

The teaching options are designed to give students the mathematical background appropriate for teaching middle grades and secondary school mathematics, but students must meet additional requirements,

including grade point average requirements, to obtain certification. Lists of the combined requirements of the UTeach-Natural Sciences certification programs and these options are available from the UTeach-Natural Sciences academic adviser and in the *Undergraduate Catalog*.

All students must complete the following:

- 1. One of the following sequences:
  - a. Mathematics 408C\* and 408D
  - b. Mathematics 408N and 408S
  - c. Mathematics 408K and 408L

\*Mathematics 408N and 408S, or 408K and 408L, may substitute for 408C

- 2. Mathematics 340L or 341
- 3. Mathematics 315C, 333L, 358K, 362K, and either 325K or 328K
- 4. Mathematics 375D
- 5. Mathematics 361K or 365C
- 6. Mathematics 343K or 373K

Students pursuing teacher certification through the UTeach-Natural Sciences program must also complete the following:

- Biology 337 (Topic 2: Research Methods: UTeach), Chemistry 368 (Topic 2: Research Methods-UTeach), or Physics 341 (Topic 7: Research Methods-UTeach);
- 8. History 329U or Philosophy 329U;
- 9. 18 semester hours of professional development coursework consisting of:
  - a. Curriculum and Instruction 651S
  - b. Curriculum and Instruction 365C or UTeach-Natural Sciences 350
  - c. Curriculum and Instruction 365D or UTeach-Natural Sciences 355
  - d. Curriculum and Instruction 365E or UTeach-Natural Sciences 360
  - e. UTeach-Natural Sciences 101, 110, and 170;
- For students seeking middle grades certification, the following courses: Educational Psychology 350G, or Psychology 301 and 304; and Curriculum and Instruction 339E

To graduate and be recommended for certification, students who follow the teaching option must have a University grade point average of at least 2.50. They must earn a grade of at least *C*- in the supporting course in requirement 8 and in each of the professional development courses listed in requirement 9 and must pass the final teaching portfolio review; those seeking middle grades certification must also earn a grade of at least *C*- in each of the courses listed in requirement 10. For information about the portfolio review and additional teacher certification requirements, students should consult the UTeach-Natural Sciences academic adviser.

## **Physics**

### Major

Physics 301, 101L, 316, 116L, 315, 115L, 355, and at least 15 semester hours of upper-division coursework in physics, including Physics 336K, 352K, and 353L

#### Additional Coursework

Completion of the following:

- 1. Chemistry 301 or 301H, 302 or 302H, and 204
- 2. One of the following courses containing differential equations: Mathematics 427K, 427J, and 372

- 3. Nine additional hours of mathematics, including three upper-division hours
- 4. Six hours of majors-level coursework, including three upper-division hours in one of the following: biology, chemistry, philosophy, psychology; or in courses offered in the College of Education or the Cockrell School of Engineering; courses used to fulfill specific degree requirements other than flag requirements may not also be used to fulfill this requirement.

Students must earn a grade of at least *C*- in each mathematics and science course required for the degree, and a University grade point average in these courses of at least 2.00.

## **Bachelor of Science and Arts**

The requirements for the bachelor of science and arts degree are designed to give each student an opportunity to combine a core mathematics or science experience with an interdisciplinary curriculum which complements his or her major. Students pursuing the Bachelor of Science and Arts will major in a discipline within the College of Natural Sciences and complete one of the following: a transcript-recognized minor, transcript-recognized certificate, or 15 hours in a single field of study. This will allow the student to explore applications of his or her major in the broader society, allow the student to see the impacts of the sciences in other fields of study, and develop a complementary expertise, which supports multidisciplinary study.

All students pursuing an undergraduate degree must complete the University's Core Curriculum (p. 23). The prescribed work requirements for the Bachelor of Science and Arts consist of the University's Core Curriculum, college flag requirements, language, arts, and culture requirement, major requirements, additional requirement, and electives.

In the process of fulfilling the core curriculum and other degree requirements, all students must complete courses with content in the following areas:

- 1. Core curriculum
- 2. Skills and experience flags:
  - a. Writing: two flagged courses beyond Rhetoric and Writing 306 or its equivalent, including one at the upper-division level
  - b. Quantitative reasoning: one flagged course
  - c. Global cultures: one flagged course
  - d. Cultural diversity in the United States: one flagged course
  - e. Ethics: one flagged course
  - f. Independent inquiry: one flagged course

Courses that may be used to fulfill flag requirements are identified in the Course Schedule (http://registrar.utexas.edu/schedules). They may be used simultaneously to fulfill other requirements, unless otherwise specified. Please note, students may not earn the cultural diversity in the United States and the global cultures flags from the same course. Students are encouraged to discuss options with their academic advisers.

Students may earn an honors major in their fields of study upon graduation by completing the following requirements:

- 1. Good standing in the Health Science Scholars Program or the Polymathic Scholars Program;
- 2. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors adviser;
- 3. Six hours of coursework in the major must be at the honors-level;

- 4. Natural Sciences 371;
- 5. A University grade point average of at least 3.50.

#### **Prescribed Work Common to All Majors**

- 1. Language, Arts, and Culture Requirement:
  - Twelve hours selected from at least two of the following four areas:
  - a. *Fine arts*: courses chosen from design, ensemble, fine arts, music, studio art, performance, visual art studies, art history, and theatre and dance
  - b. *Humanities*: courses chosen from American studies, ancient history and classical civilization, classical civilization, comparative literature, creative writing, English, humanities, philosophy, religious studies, and rhetoric and writing
  - c. Social and behavioral sciences: courses chosen from anthropology, economics, geography, government, history, linguistics, psychology, and sociology
  - d. *Foreign language and culture*: foreign language courses or culture courses chosen from an approved list available in the college advising centers. Students who elect to pursue a foreign language must complete a beginning level competency. Students who complete intermediate or advanced level foreign language courses rather than courses equivalent to beginning level competency may count only one intermediate or advanced course toward the language, arts, and culture requirement

A maximum of six semester hours earned through credit by examination may count toward the language arts and culture requirement.

- 2. Major Requirements: The specific courses required for the major vary with the major selected and are described in the links to the right. Unless the requirements of the major state otherwise, a major consists of at least 36 but no more than 55 semester hours. The major consists of the mathematics, primary science, and secondary science requirements.
- 3. Additional Requirement: The Bachelor of Science and Arts requires the completion of one of the following: transcript-recognized minor, transcript-recognized certificate, or 15 hours in a single field of study. Students who complete a transcript-recognized minor or 15 hours in a single field of study must select a minor or field of study that is outside the College of Natural Sciences, College of Pharmacy, Cockrell School of Engineering, Jackson School of Geosciences, and School of Nursing.
- 4. Electives: Enough additional coursework to make a total of 120 semester hours.

#### **Special Requirements**

- 1. Students may not use a course counting toward one area of prescribed work to fulfill the requirements of another area of prescribed work unless expressly permitted as follows:
  - a. Courses counting toward the university core curriculum may also count toward the major requirements, the additional requirement, and electives.
  - b. Courses counting toward the university core curriculum writing flag may also count toward the language, arts, and culture requirement.
  - c. Courses counting toward the college flag requirements may also count toward the university core curriculum, language, arts, and culture requirement, major requirements, additional requirement, and electives.
  - d. Per university policy, a minimum of nine hours of the transcriptrecognized minor may not be also used to satisfy the major.

- e. Per university policy, a minimum of one course taken in a transcript-recognized certificate to satisfy the additional requirement may not also count toward the major.
- 2. Students who seek a transcript-recognized minor or transcriptrecognized certificate must meet the minimum grade requirements and grade point average requirements of the program.
- 3. Students must earn a University grade point average of at least 2.00 in all courses taken at the University (including credit by examination, correspondence, and extension), a grade of at least C- in each mathematics and science course counted toward the major, and a grade point average of at least 2.00 in the courses fulfilling the major.
- 4. Students must complete a minimum of 60 hours in residence at the University, including at least 18 hours of the major. The 18 hours of the major in residence must include at least nine hours of advanced coursework.

## Astronomy

#### Major

- 1. Mathematics:
  - a. Mathematics 408C and 408D
  - b. Mathematics 427K or 427J
- 2. Primary science:
  - a. Physics 301, 101L, 315, 115L, 316, and 116L
  - Two courses chosen from the following: Astronomy 352K, 353, and 358
  - c. Six additional upper-division semester hours in astronomy and physics
- 3. Secondary science:

Twelve additional semester hours of majors-level coursework from one or more of the following areas. It is recommended that students select three of the 12 hours to also fulfill the Natural Science and Technology Part II core curriculum requirement

- a. Biology
- b. Chemistry
- c. Computer Science
- d. Geological Sciences
- e. Mathematics
- f. Statistics and Data Sciences

## **Biochemistry**

#### Major

- 1. Mathematics:
  - a. Mathematics 408C, 408R, or 408N and 408S
  - b. Statistics and Data Sciences 328M
- 2. Primary science:
  - a. Chemistry 301 or 301H, 302 or 302H, and 204
  - b. Chemistry 320M, and 353M or 455
  - c. Biochemistry 339F and 369L
  - d. Two courses chosen from the following: Biochemistry 339J, 339M, 339N, and 370
- 3. Secondary science:
  - a. Biology 311C, 311D and 325, or Biology 315H and 325H
  - b. Biology 344
  - c. One of the following physics sequences:

- i. Physics 317K, 117M, 317L, and 117N (recommended)
- ii. Physics 301, 101L, 316, and 116L
- iii. Physics 303K, 103M, 303L, and 103N

## Biology

#### Major

- 1. Mathematics:
  - a. Mathematics 408C, 408R, or 408N and 408S. Students who intend to take additional calculus coursework should begin the sequence with 408C or 408N
  - b. Statistics and Data Sciences 328M
- 2. Primary science:
  - a. Biology 206L, 208L, or 226L; 311C, 311D, and 325, or 315H and 325H
  - b. One of the following: Biology 320 or 344
  - c. Biology 370
  - d. Complete one course from each of the following:
    - i. Cellular, developmental, and molecular biology: Biochemistry 369 or 339F, 339M, 339J, 364F; Biology 320, 326R, 330, 335, 336, 339, 339M, 344, 360K, 349, 350M, 360M, 361
    - Genetics, genomics, and computational biology: Biochemistry 339N; Biology 321G, 325T, 327E, 327G, 354C, 336, 366R, 471; Statistics and Data Sciences 348
    - Physiology, neuroscience, and behavior. Biology 328, 438L, 359K, 359R, 361T, 365S, 367C, 374, Marine Science 355C
    - iv. Ecology, evolution, and biodiversity: Biology 322, 324, 346, 351, 357, 364, 373, 375; Marine Science 320, 352C, 352D, 352E, 353, 354, 354C, 354E, 354Q, 356, 357
  - e. Complete one laboratory course from the following list: Biology 320L, 122L, 124L, 226L, 129L, 325L, 230L, 331L, 328D, 340L, 446L, 448L, 349L, 353F, 453L, 354L, 455L, 456L, 260L, 361L, 463L, 165U, 369F, 369L, 371L, 373L, 174L, 478L
- 3. Secondary science:
  - a. Chemistry 301 or 301H, 302 or 302H, and 204
  - b. Complete one of the following:
    - i. Physics 302K and 102M (recommended)
    - ii. Physics 317K and 117M
    - iii. Physics 303K and 103M
    - iv. Physics 301 and 101L

## Chemistry

#### Major

- 1. Mathematics:
  - a. Mathematics 408C and 408D, or 408N and 408S
- 2. Primary science:
  - a. Chemistry 301 or 301H, 302 or 302H, and 204 or 317
  - b. Chemistry 320M, 320N and 220C, or 328M, 328N, 128K and 128L  $\,$
  - c. Chemistry 353 or 353M, and 153K
  - d. Chemistry 431; 455 or 456; and Biochemistry 369
- 3. Secondary science: One of the following physics sequences:
  - a. Physics 301, 101L, 316, and 116L
  - b. Physics 303K, 103M, 303L, and 103N
  - c. Physics 317K, 117M, 317L, and 117N  $\,$

## **Computer Science**

#### Major

- 1. Mathematics:
  - a. Mathematics 408C or 408N and 408S
  - b. Mathematics 340L or Statistics and Data Sciences 329C. Mathematics 341 may substitute for 340L.
  - c. Statistics and Data Sciences 321. Mathematics 362K may substitute for this requirement.
- 2. Primary science:
  - a. Theory: Computer Science 311 or 311H, and 331 or 331H
  - b. Programming: Computer Science 312 and 314 or 314H
  - c. Systems: Computer Science 429 or 429H, and 439 or 439H
  - d. Twelve additional semester hours of approved upper-division computer science
- 3. Secondary science:
  - a. Six semester hours of majors-level coursework chosen from a single field of study: biology, chemistry, or physics. It is recommended that students select courses that will also fulfill the Natural Science and Technology Part I core curriculum requirement.

An undergraduate may not enroll in any computer science course more than once without written consent of an undergraduate adviser in computer science. No student may enroll in any computer science course more than twice. No student may take more than three upperdivision computer science courses in a semester without written consent of an undergraduate adviser in computer science.

# Human Development and Family Sciences

#### Major

- 1. Mathematics:
  - a. Statistics and Data Sciences 302
  - Mathematics 408C, 408N, 408R, or Statistics and Data Sciences 332
- 2. Primary science:
  - Human Development and Family Sciences 304, 313, 113L, 315L, and 340
  - b. Nine semester hours of upper-division human development and family sciences
  - c. Six hours chosen from Human Development and Family Sciences 352, 652F, 352L, 652P, and 355R. Registration for Human Development and Family Sciences 352, 652F, 352L, 652P, and 355R is restricted to students whose practicum applications have been approved. Students who want to participate in an early childhood field experience/field practicum (Human Development and Family Sciences 352L or 652P) must also complete Human Development and Family Sciences 338 and 466 with grades of at least C-. Practicum applications are available in the School of Human Ecology advising office; application deadlines are May 1 for enrollment the following spring semester and December 1 for enrollment the following fall semester. If either May 1 or December 1 falls on a weekend or an official University holiday, the application is due the next business day.

#### 3. Secondary science:

- a. Chemistry 301 or 301H
  - b. Biology 311C

c. One of the following courses: Biology 311D, Chemistry 302, or 302H

Psychology 304, 333D, and 339 may not count toward the Bachelor of Science and Arts, with a major in Human Development and Family Sciences.

## Human Ecology

#### Major

- 1. Mathematics:
  - a. Statistics and Data Sciences 302
  - b. Mathematics 408C, 408N, 408R, or Statistics and Data Sciences 332
- Primary science: School of Human Ecology coursework, including: a. Public Health 317
  - b. One of the following: Human Development and Family Sciences 304, 304H, 313 and 113L, or 313H and 113L
  - c. Nutrition 306, 312, or 312H
  - d. Textiles and Apparel 303 or 205 and 105L
  - e. Fifteen semester hours of upper-division chosen from Human Development and Family Sciences, Human Ecology, Nutrition, Public Health, and Textiles and Apparel
- 3. Secondary science:
  - a. Chemistry 301 or 301H
  - b. Biology 311C
  - c. One of the following: Biology 311D, Chemistry 302, or 302H

## **Mathematics**

#### Major

- 1. Mathematics:
  - a. Mathematics 408C and 408D
- 2. Primary science:
  - a. Mathematics 341
  - b. Mathematics 328K, 343K, or 373K
  - c. Mathematics 362K
  - d. Mathematics 361K or 365C
  - e. Twelve additional semester hours of approved upper-division mathematics
- 3. Secondary science:
  - a. Six semester hours of majors-level coursework chosen from a single field of study: astronomy, biology, chemistry, geological sciences, marine science, or physics. It is recommended that students select courses that will also fulfill the Natural Science and Technology Part I core curriculum requirement.
  - b. Three semester hours of majors-level coursework chosen from a different field of study: astronomy, biology, chemistry, computer science, geological sciences, marine science, or physics. It is recommended that students select a course that will also fulfill the Natural Science and Technology Part II core curriculum requirement.

## Neuroscience

#### Major

- 1. Mathematics:
  - a. Mathematics 408C, or 408N and 408S
  - b. Statistics and Data Sciences 328M

- 2. Primary science:
  - a. Biology 206L and one of the following sequences:
    - i. Biology 311C, 311D, 325 ii. Biology 315H and 325H
  - b. Neuroscience 330
  - c. Neuroscience 335
  - d. Twelve additional semester hours of neuroscience, chosen from: Biology 359K, 367C, Neuroscience 337, 365D, 365L, 365T, 365W, 366C, 366D, 366E, 366L, 366N, 366P, 366S, 367F, 367V, 367W, 466G, 466M, and 371M. Biology 377 may count with prior approval of the faculty adviser.
- 3. Secondary science:
  - a. Chemistry 301 or 301H, 302 or 302H, and 204
  - b. One of the following physics sequences:
    - i. Physics 317K, 117M, 317L, 117N
    - ii. Physics 303K, 103M, 303L, 103N
    - iii. Physics 301, 101L, 316, 116L

## Nutrition

#### Major

- 1. Mathematics:
  - a. Statistics and Data Sciences 302, 304, 306, 325H, or 328M
  - b. Mathematics 408C or 408N or Statistics and Data Sciences 332
- 2. Primary science:
  - a. One of the following sequences:
    - i. Nutrition 312 and 112L, 315, 326, and 126L
    - ii. Nutrition 312H, 312R, and 315
  - b. One of the following sequences:
    - i. Nutrition 307 and 107L
    - ii. Nutrition 218 and 118L

c. Twelve additional semester hours of nutrition, including nine semester hours of upper-division coursework.

- 3. Secondary science:
  - a. Chemistry 301 or 301H, 302 or 302H, and 204
  - b. Chemistry 320M
  - c. Biology 311C

## Physics

#### Major

- 1. Mathematics:
  - a. Mathematics 408C, 408D, 427K or 427J, and 427L
- 2. Primary science:
  - a. Physics 301, 101L, 315, 115L, 316, and 116L
  - b. Physics 336K, 352K, 355, 369, and 373
  - c. One course chosen from the following: Mathematics 340L; and Physics 329, 333, 345, 353L, 362K, 362L, 474, 375S, 375R, or 375P
- 3. Secondary science:
  - a. Three semester hours of majors-level coursework chosen from: astronomy, biology, chemistry, computer science, and geological sciences. It is recommended that students select a course that will also fulfill the Natural Science and Technology Part II core curriculum requirement.

## **Bachelor of Science in Astronomy**

Astronomy tells us about the place of humankind in the universe: how Earth was created, how the Sun was formed, how galaxies form and evolve. It tells us where the universe is going and where it came from. Astronomers address these questions at a fundamental level. Their goal is to determine the basic and controlling properties of the universe and to transmit that knowledge to society. The Bachelor of Science in Astronomy is designed to give students an understanding of the universe and to prepare them to participate in the advancement of this exciting search.

Two Options are available: Astronomy and Astronomy Honors. Students who plan to follow Option II, Astronomy Honors, must be admitted to the Dean's Scholars Honors Program (p. 645).

#### Prescribed Work Common to all Options

In the process of fulfilling degree requirements, all students must complete:

- 1. Core curriculum
- 2. Skill and experience flags:
  - a. Writing: two flagged courses beyond Rhetoric and Writing 306 or its equivalent, including one at the upper-division level
  - b. Quantitative reasoning: one flagged course
  - c. Global cultures: one flagged course
  - d. Cultural diversity in the United States: one flagged course
  - e. Ethics: one flagged course
  - f. Independent inquiry: one flagged course

Courses that may be used to fulfill flag requirements are identified in the *Course Schedule* (http://registrar.utexas.edu/schedules). They may be used simultaneously to fulfill other requirements, unless otherwise specified. Please note, students may not earn the cultural diversity in the United States and the global cultures flags from the same course. Students are encouraged to discuss options with their academic advisers.

- 3. One of the following foreign language/culture choices: (Students in Option II are exempt from this requirement)
  - a. Beginning level proficiency coursework, or the equivalent, in a foreign language
  - b. First course in a foreign language and a three-semester-hour course in the culture of the same language area
  - c. Two three-semester-hour courses in one foreign culture area chosen from an approved list available in the dean's office and the college advising centers
- 4. At least 36 semester hours of upper-division coursework
- At least 21 hours of upper-division coursework, including at least 12 semester hours in physics and astronomy, must be completed in residence at the University

#### Additional Prescribed Work for Each Option Option I: Astronomy

- 6. Six semester hours in biology, chemistry, computer science, and/or geological sciences; Chemistry 301 or 301H and the courses in the Elements of Computing Certificate Program may be counted toward this requirement; any other course to be counted must meet major requirements in the department that offers it.
- 7. Mathematics 408C and 408D, or the equivalent; and 427J or 427K, 427L, and 340L
- Physics 301, 101L, 315, 115L, 316, 116L, 336K, 352K, 353L, 355, 362K, 369, and 373

- 9. Astronomy 352K, 353, 358, and three additional hours of upper-division astronomy. Astronomy 364P, 376C, or 376R are recommended
- 10. Nine additional semester hours of upper-division coursework in physics and/or astronomy
- 11. Enough additional coursework to make a total of 123 semester hours

#### **Option II: Astronomy Honors**

- Breadth requirement: An honors mathematics course, Chemistry 301H, and nine additional hours of coursework chosen from honors courses in the college; credit earned by examination may not be counted toward this requirement.
- 7. Physics 301, 101L, 315, 115L, 316, and 116L
- 8. Twelve semester hours of upper-division coursework in astronomy approved by the departmental honors adviser
- 9. Eighteen semester hours of upper-division coursework in physics approved by the departmental honors adviser
- 10. Three additional semester hours of upper-division coursework in astronomy or physics
- 11. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors adviser
- 12. A section of Rhetoric and Writing 309S that is restricted to students in the Dean's Scholars Honors Program
- Astronomy 379H and either a three-semester-hour upper-division research course approved by the departmental honors adviser or a second section of Astronomy 379H
- 14. Sixteen additional hours of coursework approved by the departmental honors adviser
- 15. Six semester hours of coursework from the College of Liberal Arts and/or the College of Fine Arts
- 16. Enough additional coursework to make a total of 120 semester hours

#### **Special Requirements**

Students in both Options must fulfill both the University's General Requirements (p. 20) for graduation and the college requirements (p. 648). They must also earn a grade of at least *C*- in each mathematics and science course required for the degree, and a University grade point average in these courses of at least 2.00. More information about grades and the grade point average is given in the *General Information Catalog* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/computation-of-the-grade-point-average).

To graduate under Option II, students must remain in good standing in the Dean's Scholars Honors Program, must submit an honors thesis approved by the departmental honors adviser, and present their research in an approved public forum, such as the college's annual Undergraduate Research Forum (http://cns.utexas.edu/researchexperience/undergraduate-research/undergraduate-research-forum). More information about the Undergraduate Research Forum is available at https://cns.utexas.edu.

## Bachelor of Science in Biochemistry

The degree of Bachelor of Science in Biochemistry is intended to prepare students for professional careers as chemists, either upon graduation or after graduate study in chemistry or related fields. In addition, it may serve as the basis for work in many areas outside pure chemistry, such as materials science, medicine and other health-related fields, pharmacology, patent law, business, and environmental science. The Honors Option is intended to prepare students for academic or research careers.

Students who plan to follow Option III, Biochemistry Honors, must be admitted to the Dean's Scholars Honors Program (p. 645).

#### **Prescribed Work Common to all Options**

In the process of fulfilling degree requirements, all students must complete:

- 1. Core curriculum
- 2. Skills and experience flags:
  - a. Writing: two flagged courses beyond Rhetoric and Writing 306 or its equivalent, including one at the upper-division level
  - b. Quantitative reasoning: one flagged course
  - c. Global cultures: one flagged course
  - d. Cultural diversity in the United States: one flagged course
  - e. Ethics: one flagged course
  - f. Independent inquiry: one flagged course

Courses that may be used to fulfill flag requirements are identified in the *Course Schedule* (http://registrar.utexas.edu/schedules). They may be used simultaneously to fulfill other requirements, unless otherwise specified. Please note, students may not earn the cultural diversity in the United States and the global cultures flags from the same course. Students are encouraged to discuss options with their academic advisers.

- 3. At least 36 semester hours of upper-division coursework
- At least 21 semester hours of upper-division coursework, including at least 12 semester hours of upper-division coursework in chemistry, must be completed in residence at the University

#### Additional Prescribed Work for Each Option

#### **Option I: Biochemistry**

- 5. Mathematics 408C and 408D, or 408N, 408S, and 408M
- 6. Biostatistics: Statistics and Data Sciences 328M
- 7. One of the following sequences:
  - a. Physics 317K, 117M, 317L, and 117N (recommended);
  - b. Physics 303K, 103M, 303L, and 103N; or
  - c. Physics 301, 101L, 316, and 116L
- 8. The following chemistry courses:
  - a. General chemistry: Chemistry 301 or 301H, 302 or 302H, and 204 or 317
  - b. Organic chemistry: Chemistry 320M
  - c. Biochemistry: Biochemistry 339F and 369L, and two additional courses chosen from Biochemistry 339J, 339M, and 370
  - d. Physical chemistry: Chemistry 353 or 353M
  - e. Analytical chemistry: Chemistry 455
- 9. One of the following sequences:
  - a. Biology 311C, 311D, and 325; or
  - b. Biology 315H and 325H
- 10. Biology 344
- Completion of one of the following:
   a. Eighteen additional semester hours of upper-division biochemistry, biology, chemistry, and neuroscience; or

b. A transcript-recognized certificate or a transcript-recognized minor

12. Enough additional coursework to make a total of 120 semester hours

#### **Option III: Biochemistry Honors**

- Breadth requirement: An honors mathematics course, Biology 315H and 325H, Chemistry 301H and 302H, and three additional semester hours of coursework chosen from honors courses in the college. Credit earned by examination may not be counted toward this requirement.
- 6. The following chemistry courses:
  - a. General chemistry: Chemistry 204 or 317
  - b. Organic chemistry: Chemistry 128K, 128L, 328M, and 328N; or 220C, 320M, and 320N
  - c. Biochemistry: Biochemistry 339F and 369L, and two additional courses chosen from Biochemistry 339J, 339M, 339N, and 370
  - d. Physical chemistry: Chemistry 353 or 353M
  - e. Analytical chemistry: Chemistry 455
- 7. Biology 344
- 8. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors adviser
- 9. A section of Rhetoric and Writing 309S that is restricted to students in the Dean's Scholars Honors Program
- Chemistry 379H or Biochemistry 379H and either a threesemester-hour upper-division research course approved by the departmental honors adviser or a second section of Chemistry 379H or Biochemistry 379H
- 11. Twenty-four additional semester hours of coursework approved by the departmental honors adviser.
- 12. Six semester hours of coursework from in the College of Liberal Arts and/or the College of Fine Arts.
- 13. Enough additional coursework to make a total of 120 semester hours.

### **Special Requirements**

Students in all Options must fulfill both the University's (p. 20) General Requirements (p. 20) for graduation and the college requirements (p. 648). They must also earn a grade of at least *C*- in each mathematics and science course required for the degree, and a University grade point average in these courses of at least 2.00. More information about grades and the grade point average is given in the *General Information* (http://catalog.utexas.edu/general-information/ academic-policies-and-procedures/computation-of-the-grade-point-average) *Catalog*.

To graduate under Option III, students must remain in good standing in the Dean's Scholars Honors Program, must submit an honors thesis approved by the departmental honors adviser and present their research in an approved public forum, such as the college's annual Undergraduate Research Forum. More information about the Undergraduate Research Forum is available at https://cns.utexas.edu.

### Order and Choice of Work

The student must consult the undergraduate adviser each semester regarding order and choice of work.

## **Bachelor of Science in Biology**

The Bachelor of Science in Biology degree program offers 11 Options. The Options have certain prescribed work in common, and each Option has additional requirements. Many fields in the study of biological systems require broadly based training that transcends the classical boundaries of biology. In planning a program of work to meet his or her degree requirements, a student interested in specializing in these interdisciplinary areas should choose courses both in biology and in sciences that complement biology.

Students who plan to follow Option IX, Biology Honors, must be admitted to the Dean's Scholars Honors Program (p. 645).

## **Prescribed Work Common to All Options**

In the process of fulfilling degree requirements, all students must complete:

- 1. Core curriculum
- 2. Skills and experience flags:
  - a. Writing: two flagged courses beyond Rhetoric and Writing 306 or its equivalent, including one at the upper-division level
  - b. Quantitative reasoning: one flagged course
  - c. Global cultures: one flagged course
  - d. Cultural diversity in the United States: one flagged course
  - e. Ethics: one flagged course
  - f. Independent inquiry: one flagged course

Courses that may be used to fulfill flag requirements are identified in the *Course Schedule* (http://registrar.utexas.edu/schedules). They may be used simultaneously to fulfill other requirements, unless otherwise specified. Please note, students may not earn the cultural diversity in the United States and the global cultures flags from the same course. Students are encouraged to discuss options with their academic advisers.

- 3. Courses common to all Bachelor of Science in Biology degree Options except for Option IX.
  - a. Mathematics 408C, 408R, or 408N and 408S. Students who intend to take additional calculus coursework should begin the sequence with 408C or 408N
  - b. Statistics and Data Sciences 328M
  - c. Chemistry 301 or 301H, 302 or 302H, and 204
  - d. One of the following sequences:
    - i. Physics 317K, 117M, 317L, and 117N (recommended)
    - ii. Physics 301, 101L, 316, and 116L
    - iii. Physics 303K, 103M, 303L, and 103N
    - iv. Physics 302K, 102M, 302L, and 102N

Option VIII Teaching majors may substitute Science 365 and Physics 108 for Physics 316 and 116L, 317L and 117N, 303L and 103N, or 302L and 102N; Physics 108 is offered on the pass/fail basis.

- e. Biology, including:
  - i. Biology 311C, 311D, and 325, or 315H and 325H.

ii. Biology 206L, 208L, or 226L. This requirement must be completed prior to progressing to additional laboratory requirement in the degree options. Students pursuing Option III, Marine and Freshwater Science, and Option IV, Microbiology and Infectious Diseases, must complete Biology 226L. Students pursuing Option VIII, Teaching, must complete either Biology 206L or 208L.

iii. Biology 370

4. All students must complete at least 36 semester hours of upperdivision coursework; at least 21 semester hours of upper-division coursework in biology must be completed in residence at the University.

#### **Additional Prescribed Work for Each Option**

#### **Option I: Ecology, Evolution, and Behavior**

5. One course or pair of courses in each of the following areas:

a. Ecology: Biology 357, 373, or Marine Science 320 and 120L

b. Behavior and comparative physiology: Biology 322 and 122L, 359K, or 361T

c. Taxon-based course: Biology 321L, 324 and 124L, 327 and 127L, 340L, 448L, 351, 352, 353F, 453L, 354L, 455L, 463L, 369F, 369L, Marine Science 352D, 354, 354C, 354E

- 6. Three additional courses or pair of courses chosen from coursework in 5a through 5c and from Biology 438L, 471G, 456L, 359R, 364, 373L, 374 and 174L, 375, 478L, Marine Science 352C, and 354Q
- One course in cellular, developmental, genetics, microbiology, or molecular biology: Biology 320, 320L, 325L, 325T, 326R, 328, 331L, 344, 349, 349L, 350M, 366R
- One laboratory course or pair of courses containing a substantial field component: Biology 321L, 340L, 353F, 453L, 354L, 455L, 456L, 369L, 373L, Marine Science 320 and 120L, 352C, 352D, 354, 354C, 354E. A laboratory course or pair of courses may also count toward requirements 5 through 7
- One additional laboratory course: Biology 320L, 321L, 124L, 127L, 325L, 331L, 438L, 340L, 448L, 349L, 353F, 453L, 354L, 455L, 456L, 369L, 373L, 174L, 478L, Marine Science 120L, 352C, 352D, 354, 354C, 354E, 354Q. One-hour laboratory courses may require credit for or registration in a complementary lecture course. A laboratory course may also count toward requirements 5 through 7. A course counted toward requirement 8 may not also count toward requirement 9.
- One course chosen from the following: Chemistry 320M, Computer Science 303E or 313E, Geological Sciences 401 or 303, Statistics and Data Sciences 332 or 348
- 11. Enough additional coursework to make a total of 120 semester hours

#### **Option II: Human Biology**

- 5. Chemistry 320M, 320N, 220C
- 6. Biochemistry 369 or 339F
- 7. Biology 346
- 8. Three hours from genetics, genomics, and computational biology: Biochemistry 339N, Biology 321G, 325T, 327E, 327G, 354C, 366, 366R, 471, Statistics and Data Sciences 348
- Six hours from cellular, developmental, and molecular biology: Biochemistry 339J, 339M, 364F, Biology 320, 326R, 330, 335, 336, 339, 339M, 344, 360K, 349, 350M, 360M, 361
- 10. Three hours from ecology, environment, and health: Biology 326R, 327D, 329, 330, 361, 364, Nutrition 306 or 312
- 11. Four hours from physiology and anatomy: Biology 446L, 365S and 165U, 478L
- One additional laboratory course from: Biology 320L, 122L, 124L, 128L, 129L, 325L, 328D, 230L, 331L, 340L, 446L, 448L, 349L, 353F, 453L, 354L, 455L, 456L, 260L, 361L, 463L, 165U, 369F, 369L, 371L, 373L, 174L, 478L, Marine Science 120L, 152L. One-hour laboratory courses may require credit for or registration in a complementary lecture course.
- 13. Enough additional coursework to make a total of 120 semester hours

#### **Option III: Marine and Freshwater Science**

5. Chemistry 320M

- 6. Biology 326R and 373
- 7. Marine Science 101, 310, 320, and 120L
- Eighteen hours of coursework including 12 hours in Marine Science, chosen from: Biology 320, 321L, 328, 344, 354L, 357, 361T, 364, 366, 375, Geological Sciences 341G, Marine Science 440, 348 (Topic 1: *Training Cruise(s)*), 352, 352C, 352D, 352E, 152L, 152S, 252S, 152T, 252T, 353, 354, 354C, 354E, 354J, 354Q, 354T, 354U, 355C, 356, 357, 367K, 170, 270, 370. Six hours in Marine Science must be completed at the Marine Science Institute in Port Aransas, Texas.
- 9. Enough additional coursework to make a total of 120 semester hours

#### **Option IV: Microbiology and Infectious Diseases**

- 5. Biochemistry 369 or 339F, and Chemistry 320M
- 6. Biology 326R, 330, 339, 339M, 360K, 361, 366
- 7. Two upper-division biology laboratory courses chosen from: Biology 230L, 260L, and 361L. Biology 377, 377-FRI, 379H may be used for one of the laboratory courses if approved in advance by the microbiology faculty adviser.
- 8. Fifteen additional hours in upper-division biochemistry, biology, and chemistry
- 9. Enough additional coursework to make a total of 120 semester hours

#### **Option V: Cell and Molecular Biology**

- 5. Biochemistry 369 or 339F, and Chemistry 320M
- 6. Biology 320, 326R, 349, and 344 or 350M
- 7. Two laboratory courses chosen from: Biology 320L, 325L, 331L, 349L
- 8. One additional upper-division laboratory course in biology. Biology 377, 377-FRI, 379H may be used if approved in advance by the cell and molecular biology faculty adviser.
- 9. Eighteen additional hours in upper-division biochemistry, biology, and chemistry
- 10. Enough additional coursework to make a total of 120 semester hours

#### **Option VII: Plant Biology**

- 5. Biology 328, 373, and 322 and 122L, 324 and 124L, or 463L
- 6. Two additional upper-division laboratory courses;Biology 377, 377-FRI, 379H may be used for one of the laboratory courses if approved in advance by the plant biology faculty adviser.
- 7. One of the following sequences:
  - a. Plant molecular biology: Biochemistry 369 or 339F, Biology 320 and 350M, and Chemistry 320M
  - b. Plant environmental biology: Biology 357, 374, and 375
- 8. Eighteen additional hours in upper-division biochemistry, biology, chemistry, and marine science
- 9. Enough additional coursework to make a total of 120 semester hours

#### **Option VIII: Teaching**

This Option is designed to fulfill the course requirements for certification as a middle grades or secondary school science teacher in Texas; the student chooses either composite science certification with biology as the primary teaching field or life science certification. However, completion of the course requirements does not guarantee the student's certification. Information about additional certification requirements is available from the UTeach-Natural Sciences academic adviser.

- 5. Chemistry 320M, 320N, and 220C or 320M and Biochemistry 369
- 6. Biology courses:
  - a. Biology 320, 226L, 326R, and either 324 and 124L, 322 and 122L, or 328 and 128L

- At least three semester hours chosen from the following courses in physiology, neurobiology, and behavior. Biology 438L, 359K, 359R, 361T, 365S, 367C
- c. At least three semester hours chosen from: Biology 340L, 448L, 453L, 455L, 456L, 463L, 364, 369L, 373, Marine Science 352D, 354, 354C
- One of the following research methods courses: Biology 328D, 337 (Topic 2: Research Methods: UTeach), Chemistry 368 (Topic 1: Research Methods: UTeach), Physics 341 (Topic 7: Research Methods: UTeach)
- 8. History 329U or Philosophy 329U
- 9. One of the following:
  - a. For composite science certification: Biochemistry 369 (to be counted as upper-division biology hours) and six semester hours of coursework in geological sciences. Courses intended for nonscience majors may not be counted toward this requirement. The remaining composite certification content requirements are met by the chemistry, physics, and science courses used to fulfill requirements 3c, 3d, 3ei, and 5.
  - For life science certification: Biology 373, and three additional semester hours of biology chosen from the courses listed in requirement 6b and 6c
- 10. 18 semester hours of professional development coursework consisting of:
  - a. Curriculum and Instruction 651S
  - b. Curriculum and Instruction 365C or UTeach-Natural Sciences 350
  - c. Curriculum and Instruction 365D or UTeach-Natural Sciences 355
  - d. Curriculum and Instruction 365E or UTeach-Natural Sciences 360
  - e. UTeach-Natural Sciences 101, 110, and 170
- Students seeking middle grades certification must complete the following courses: Educational Psychology 350G, or Psychology 301 and 304; and Curriculum and Instruction 339E
- 12. Enough additional coursework to make a total of 126 semester hours

#### **Option IX: Biology Honors**

- Breadth requirement: An honors mathematics course; Biology 315H and 325H; Chemistry 301H and 302H; and an additional three-hour honors-designated course from a department in College of Natural Sciences. Credit earned by examination may not be counted toward this requirement.
- 6. An eight-semester-hour sequence of coursework in physics chosen from the following:
  - a. Physics 301, 101L, 316, and 116L;
  - b. Physics 317K, 117M, 317L, and 117N; or
  - c. Physics 303K, 103M, 303L, and 103N
- 7. Biology 206L or 208L and Chemistry 204
- 8. Complete 24 hours chosen from any of the following courses:
  - a. Biology 370
  - Cellular, developmental, and molecular biology: Biochemistry 369 or 339F, 339J, 339M, 364F, Biology 320, 326R, 330, 335, 336, 339, 339M, 344, 360K, 349, 350M, 360M, 361
  - c. Genetics and genomics: Biochemistry 339N, Biology 321G, 325T, 327E, 327G, 354C, 366, 366R, 471, Statistics and Data Sciences 348
  - d. Physiology, neuroscience, and behavior. Biology 328, 438L, 359K, 359R, 361T, 367C, 365S, 374, Marine Science 355C
  - Ecology, evolution, and biodiversity: Biology 322, 324, 346, 351, 357, 364, 471G, 373, 375, Marine Science 320, 352C, 352D, 352E, 353, 354, 354C, 354E, 354Q, 356, 357

- 9. Three upper-division laboratory courses in biology; Biology 377 or 379H may be used as only one of the three required upper-division laboratory courses. Courses used to fulfill this requirement may also be counted toward requirement 8.
- 10. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors adviser
- 11. A section of Rhetoric and Writing 309S that is restricted to students in the Dean's Scholars Honors Program
- 12. Two semesters of Biology 379H
- 13. Fifteen additional semester hours of coursework approved by the departmental honors adviser
- 14. Six semester hours of coursework from the College of Liberal Arts and/or the College of Fine Arts
- 15. Enough additional coursework to make a total of 120 semester hours

#### **Option X: Computational Biology**

- Statistics and Data Sciences 329C or Mathematics 340L or 341; Mathematics 362K or Statistics and Data Sciences 321; and Statistics and Data Sciences 348
- Two courses from: Computer Science 303E, 313E, 323E, 323H, 324E, 326E, 327E, 329E, Mathematics 408D, 358K, 378K, Statistics and Data Sciences 322, 323, 329D, 332, 335, 352, 353, 358, 374C, 374D, 374E.
- 7. Two courses from genetics, genomics, and computational biology: Biochemistry 339N, Biology 321G, 325T, 327E, 327G, 354C, 366, 366R, 471
- 8. Six hours chosen from any of the following courses:
  - a. Cellular, development, and molecular biology: Biochemistry 369 or 339F, 339J, 339M, 364F, Biology 320, 326R, 330, 335, 336, 339, 339M, 344, 360K, 349, 350M, 360M, 361
  - b. Physiology, neuroscience, and behavior: Biology 328, 438L, 359K, 359R, 361T, 367C, 365S, 374, Marine Science 355C
  - c. Ecology, evolution, and biodiversity: Biology 322, 324, 346, 351, 357, 364, 471G, 373, 375, Marine Science 320, 352C, 352D, 352E, 353, 354, 354C, 354E, 354Q, 356, 357
- One additional laboratory course chosen from: Biology 320L, 122L, 124L, 128L, 129L, 325L, 328D, 230L, 331L, 340L, 446L, 448L, 349L, 353F, 453L, 354L, 455L, 456L, 260L, 361L, 463L, 165U, 369F, 369L, 371L, 373L, 174L, 478L, Marine Science 120L, 152L
- Nine hours of additional upper-division biochemistry, biology, chemistry, marine science, mathematics, physics, and statistics and data sciences
- 11. Enough additional coursework to make a total of 120 semester hours

#### **Option XI: Biology**

- Two courses from cellular, developmental, and molecular biology: Biochemistry 369 or 339F, 339J, 339M, 364F, Biology 320, 326R, 330, 335, 336, 339, 339M, 344, 360K, 349, 350M, 360M, 361
- Two courses from genetics, genomics, and computational biology: Biochemistry 339N, Biology 321G, 325T, 327E, 327G, 354C, 366, 366R, 471, Statistics and Data Sciences 348
- 7. Two courses from physiology, neurobiology, and behavior. Biology 328, 438L, 359K, 359R, 361T, 367C, 365S, 374, Marine Science 355C
- Two courses from ecology, evolution, and biodiversity: Biology 322, 324, 346, 351, 357, 364, 471G, 373, 375, Marine Science 320, 352C, 352D, 352E, 353, 354, 354C, 354E, 354Q, 356, 357
- Two additional laboratory courses: Biology 320L, 122L, 124L, 128L, 129L, 325L, 328D, 230L, 331L, 340L, 446L, 448L, 349L, 353F, 453L, 354L, 455L, 456L, 260L, 361L, 463L, 165U, 369F, 369L, 371L, 373L, 174L, 478L, Marine Science 120L, 152L. One-hour laboratory courses

may be required credit for or registration in a complementary lecture course.

- Twelve additional hours in upper-division biochemistry, biology, chemistry, marine science, mathematics, statistics and data sciences, and physics
- 11. Enough additional coursework to make a total of 120 semester hours.

#### **Option XII: Genetics and Genomics**

- 5. Biochemistry 369 or 339F
- 6. Biology 320, 325T, 349, 344, and 325L
- 7. Chemistry 320M
- 8. Three hours from: Biochemistry 339N, Biology 321G, Statistics and Data Sciences 348
- 9. Six hours from: Biology 326R, 327E, 327G, 354C, 366, 366R
- 10. Biology 320L or 349L
- 11. Nine additional hours in upper-division biochemistry, biology, chemistry, mathematics, and statistics and data sciences
- 12. Enough additional coursework to make a total of 120 semester hours

#### **Special Requirements**

Students in all Options must fulfill both the University's General Requirements (p. 20) for graduation and the college requirements (p. 648). They must also earn a grade of at least *C*- in each mathematics and science course required for the degree, and a grade point average in these courses of at least 2.00. More information about grades and the grade point average is given in *General Information* (http://catalog.utexas.edu/general-information/academic-policies-andprocedures/computation-of-the-grade-point-average).

To graduate and be recommended for certification, students who follow the teaching Option must have a University grade point average of at least 2.50. They must earn a grade of at least *C*- in the supporting course in requirement 8, and in each of the professional development courses listed in requirement 10 and must pass the final teaching portfolio review; those seeking middle grades certification must also earn a grade of at least *C*- in each of the courses listed in requirement 11. For information about the portfolio review and additional teacher certification requirements, students should consult the UTeach-Natural Sciences academic adviser.

To graduate under Option IX, students must remain in good standing in the Dean's Scholars Honors Program (http://cns.utexas.edu/honors/ honors-programs-center/deans-scholars), must submit an honors thesis approved by the departmental honors adviser, and present their research in an approved public forum, such as the college's annual Undergraduate Research Forum. More information about the Undergraduate Research Forum is available at https://cns.utexas.edu/.

#### Order and Choice of Work

Students begin the Bachelor of Science in Biology degree program with six hours of introductory biology for science majors (Biology 311C and 311D), as well as Chemistry 301 or 301H and 302 or 302H and Mathematics 408C, 408N, or 408R. Students should consult with academic advisers about specific concentrations within biology, about appropriate courses in mathematics and physical sciences, and about course load and the balance between laboratory and nonlaboratory work. Most students select an Option by the end of the second year and take at least 21 hours of upper-division coursework in the major in the third and fourth years.

## **Bachelor of Science in Chemistry**

Four degree plans lead to the Bachelor of Science in Chemistry. Option I, Chemistry, is intended to prepare students for professional careers as chemists, either upon graduation or after graduate study in chemistry or related fields. Option II, Computation, is intended to prepare students for the workplace by giving them opportunities to develop hands-on computation skills. Option III, Teaching, is intended to prepare students to enter the teaching profession. Option IV, Chemistry Honors, is intended to prepare students for academic or research careers. Students who plan to follow Option IV must be admitted to the Dean's Scholars Honors Program (p. 645).

The four degree plans may also serve as the basis for work in many areas outside pure chemistry, such as materials science, medicine and other health-related fields, pharmacology, patent law, business, computation, or environmental science. After general chemistry courses, depending on his or her background, the student makes an intensive core study of some of the major areas of chemistry-organic, physical, inorganic, and analytical chemistry. The chemistry coursework in these degree plans culminates in approximately three semesters of advanced work, allowing each student to study more broadly by taking courses in some areas of chemistry not covered in the core courses, such as macromolecular chemistry, biochemistry, or other areas of physical chemistry, or more deeply by taking advanced special topics courses in areas of special interest and by undertaking research projects. Throughout the curricula, emphasis is placed on laboratory experience -synthesis, separations and analysis, structure identification and determination, measurement of rates of reactions, determinations of energy changes accompanying reactions. Supporting work in mathematics and physics is an integral part of the degree programs. Compared to the program leading to the bachelor of arts degree, the Bachelor of Science in Chemistry degree programs are more thorough and demanding and potentially more rewarding to the student planning a career in chemistry.

#### **Prescribed Work Common to All Options**

In the process of fulfilling degree requirements, all students must complete:

- 1. Core curriculum
- 2. Skills and experience flags:
  - a. Writing: two flagged courses beyond Rhetoric and Writing 306 or its equivalent, including one at the upper-division level
  - b. Quantitative reasoning: one flagged course
  - c. Global cultures: one flagged course
  - d. Cultural diversity in the United States: one flagged course
  - e. Ethics: one flagged course
  - f. Independent inquiry: one flagged course

Courses that may be used to fulfill flag requirements are identified in the *Course Schedule* (http://registrar.utexas.edu/schedules). They may be used simultaneously to fulfill other requirements, unless otherwise specified. Please note, students may not earn the cultural diversity in the United States and the global cultures flag from the same course. Students are encouraged to discuss options with their academic advisers.

3. Options I and II: One of the following foreign language/culture choices: (Students in Options III and IV are exempt from this requirement.)

- a. Beginning level proficiency coursework, or the equivalent, in a foreign language
- b. First course in a foreign language and a three-semester-hour course in the culture of the same language area
- c. Two three-semester-hour courses in one foreign culture area. The courses must be chosen from an approved list available in the dean's office and the college advising centers.
- 4. The following courses:
  - a. General chemistry: Chemistry 301 or 301H, 302 or 302H, and 317
  - b. Organic chemistry: Chemistry 128K, 128L, 328M, and 328N; or 220C, 320M, and 320N
  - c. Biochemistry: Biochemistry 339F or 369
  - d. Physical chemistry: Chemistry 353 or 353M, 153K, 154K, and either 354 or 354L
  - e. Inorganic chemistry: Chemistry 431
  - f. Analytical chemistry: Chemistry 456 and 376K
- 5. Thirty-six semester hours of upper-division coursework.
- At least 21 semester hours of upper-division coursework, including at least 12 semester hours of upper-division coursework in chemistry, must be completed in residence at the University.

#### Additional Prescribed Work for Each Option

#### **Option I: Chemistry**

- 7. Mathematics 408C and 408D, or 408N, 408S, and 408M; and at least three semester hours of upper-division coursework in mathematics or computer science
- 8. One of the following sequences:
  - a. Physics 301, 101L, 316, and 116L
  - b. Physics 303K, 103M, 303L, and 103N or
  - c. Physics 317K, 117M, 317L, and 117N
- 9. Six semester hours chosen from the following courses: Biochemistry 339J, 364C, 364D, 364E, 364F, 369L\*, 370, Chemistry 341\*, 354, 354L, 354S, 367C, 367L, 368, 369K\*, 371K\*, 372C\*, 375K, and 475K. At least three of these six hours must be in a laboratory course; courses marked with an asterisk (\*) may be used to fulfill this laboratory requirement. Chemistry 341 and 368 may be repeated for credit toward this requirement when the topics vary. No more than three semester hours in Chemistry 369K may be counted toward this requirement; three additional hours may be counted as electives. No more than three semester hours in Chemistry 371K may be counted as electives. No more than three semester hours in Chemistry 371K may be counted as electives. No more than three hours in Chemistry 372C may be counted toward this requirement; three additional hours may be counted as electives. No more than three hours in Chemistry 372C may be counted toward this requirement; three additional hours may be counted as electives.
- 10. Nine additional semester hours of coursework in the College of Natural Sciences (excluding chemistry), the Cockrell School of Engineering, and the Jackson School of Geosciences. Any course designed for science or engineering majors may be counted. With the exception of courses in the Elements of Computing Certificate Program, a course may not be used to fulfill this requirement if it cannot be counted toward major requirements in the department that offers it. No more than six hours of laboratory or field research from the Jackson School or any department in the College of Natural Sciences or the Cockrell School may be counted.
- 11. Enough additional coursework to make a total of 127 semester hours

#### **Option II: Computation**

Students who complete Option II may simultaneously fulfill some of the requirements of the Scientific Computation and Data Sciences Certificate (p. 692).

- 7. Mathematics 408C and 408D, or 408N, 408S, and 408M; and Statistics and Data Sciences 329C or Mathematics 340L or 341
- 8. One of the following sequences:
  - a. Physics 301, 101L, 316, and 116L
  - b. Physics 303K, 103M, 303L, and 103N or
  - c. Physics 317K, 117M, 317L, and 117N
- 9. Chemistry 354M
- 10. At least three semester hours chosen from the following laboratory courses: Biochemistry 369T, Chemistry 341, 369K, and 371K
- 11. Statistics and Data Sciences 322 and three of the following courses; the student must complete coursework from at least two of the following areas.
  - a. Numerical methods: Chemical Engineering 348, Computer Science 323E, 323H, 367, Mathematics 348, Statistics and Data Sciences 335
  - b. Statistical methods: Biomedical Engineering 335, Mathematics 358K, 378K
  - c. Other computing topics: Computer Science 324E, 327E, 329E (approved topics), 377, Mathematics 346, 362M, 368K, 372K, 376C, Mechanical Engineering 367S, Statistics and Data Sciences 329D, 374C, 374D, 374E
- 12. Enough additional coursework to make a total of 127 semester hours

#### **Option III: Teaching**

This Option is designed to fulfill the course requirements for certification as a middle grade or secondary school science teacher in Texas; the student chooses one of the following areas: composite science certification with chemistry as the primary teaching field; physical sciences certification; or physical science, mathematics, and engineering certification. However, completion of the course requirements does not guarantee the student's certification. Information about additional teacher certification requirements is available from the UTeach-Natural Sciences academic adviser.

- 7. Mathematics 408C and 408D, or 408N, 408S, and 408M
- 8. History 329U or Philosophy 329U
- 9. One of the following sequences:
  - a. For students seeking composite science certification: Physics 301, 101L, 316, and 116L; or Physics 303K, 103M, 303L, and 103N; or Physics 317K, 117M, 317L, and 117N. Science 365 and Physics 108 (Topic: *Physics by Inquiry*) may substitute for Physics 316 and 116L, 317L and 117N, or 303L and 103N. Physics 108 is offered on the pass/fail basis.
  - b. For students seeking either physical sciences certification or, mathematics, physical science, and engineering certification: Physics 301, 101L, 316, 116L, 315, and 115L; or 303K, 103M, 303L, 103N, 315, and 115L
- 10. The requirements of one of the following certification areas:

- a. For composite science certification:
  - i. Biology 311C and 311D
  - ii. Six hours of coursework in geological sciences; courses intended for non-science majors may not be counted toward this requirement
  - Enough additional approved coursework in biology, geological sciences, or physics to provide the required 12 hours in a second field
  - iv. Chemistry 368 (Topic 1: *Research Methods: UTeach*) or, with the consent of the UTeach-Natural Sciences academic adviser, an upper-division chemistry course that includes a substantial research component
  - v. In place of requirements 4c through 4f of the prescribed work above, the following courses, for a total of at least 34 semester hours of chemistry: Biochemistry 339F or 369; Chemistry 353; and 455 or 456
- b. For physical sciences certification:
  - i. Mathematics 427J or 427K and 427L
  - ii. Chemistry 153K, 354L, and 154K
  - iii. Chemistry 354 and three hours of upper-division coursework in physics
  - iv. Chemistry 368 (Topic 1: *Research Methods: UTeach*) or, with the consent of the UTeach-Natural Sciences academic adviser, an upper-division chemistry course that includes a substantial research component
  - v. In place of requirements 4c through 4f of the prescribed work above, the following courses, for a total of at least 34 semester hours of chemistry: Biochemistry 339F or 369; Chemistry 353, and 455 or 456
- c. For mathematics, physical science, and engineering certification:
  - i. Mathematics 315C, 360M or 375D (Topic: *Discovery: Introduction to Advanced Study in Mathematics*), 427J or 427K, and 333L
  - ii. Chemical Engineering 379 (Topic: Fundamentals of Engineering and Design), 379 (Topic: Engineering Energy Systems), and Mechanical Engineering 379M (Topic: Design of Machines and Systems)
  - iii. Engineering Studies 301; and Mechanical Engineering 377K upon approval of the project by the UTeach Program
  - iv. In place of requirements 4c through 4f of the prescribed work above, the following courses, for a total of at least 30 semester hours in chemistry: Chemistry 353 and 153K, 455, and Biochemistry 369
- 11. 18 semester hours of professional development coursework consisting of:
  - a. Curriculum and Instruction 651S
  - b. Curriculum and Instruction 365C or UTeach-Natural Sciences 350
  - c. Curriculum and Instruction 365D or UTeach-Natural Sciences 355
  - d. Curriculum and Instruction 365E or UTeach-Natural Sciences 360
  - e. UTeach-Natural Sciences 101, 110, and 170
- Students seeking middle grades certification must complete the following courses: Educational Psychology 350G or Psychology 301 and 304; and Curriculum and Instruction 339E
- 13. Enough additional coursework, if needed, to make a total of 126 semester hours

#### **Option IV: Chemistry Honors**

 Breadth requirement: An honors mathematics course, Chemistry 301H and 302H, Physics 301, 101L, 316, and 116L, and an additional three-hour honors-designated course from a department in the College of Natural Sciences. Credit earned by examination may not be counted toward this requirement

- 8. Chemistry 317
- 9. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors adviser
- 10. A section of Rhetoric and Writing 309S that is restricted to Dean's Scholars
- Chemistry 379H and a three-semester-hour upper-division research course approved by the departmental honors adviser, or six hours of Chemistry 379H
- 12. Twenty-two additional hours of coursework approved by the departmental honors adviser
- 13. Six semester hours of coursework from the College of Liberal Arts and/or the College of Fine Arts
- 14. Enough additional coursework to make a total of 120 semester hours

#### **Special Requirements**

Students in all Options must fulfill both the University's General Requirements (p. 20) for graduation and the college requirements (p. 648). They must also earn a grade of at least *C*- in each mathematics and science course required for the degree, and a University grade point average in these courses of at least 2.00. More information about grades and the grade point average is given in the *General Information* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/computation-of-the-grade-point-average) *Catalog.* 

To graduate and be recommended for certification, students who follow the teaching option must have a University grade point average of at least 2.50. They must earn a grade of at least *C*- in the supporting course in requirement 7, and each of the professional development courses listed in requirement 10 and must pass the final teaching portfolio review; those seeking middle grades certification must also earn a grade of at least *C*- in each of the courses listed in requirement 11. For information about the portfolio review and additional teacher certification requirements, consult the UTeach-Natural Sciences academic adviser.

To graduate under Option IV, students must remain in good standing in the Dean's Scholars Honors Program, must submit an honors thesis approved by the departmental honors adviser, and present their research in an approved public forum, such as the college's annual Undergraduate Research Forum. More information about the Undergraduate Research Forum is available at https://cns.utexas.edu

#### Order and Choice of Work

Students are strongly recommended to take the chemistry/ biochemistry-major sections of the following courses: Chemistry 301 or 301H (if taken), 302 or 302H, 128K, 128L, 328M, and 328N. Students planning a graduate program are strongly recommended to take Physics 301, 101L, 316, 116L, 315, and 115L

Students in Option II should consult the undergraduate adviser each semester regarding order and choice of work; those in Option III should consult the UTeach-Natural Sciences academic adviser.

The following order of work is recommended as a typical minimum program for Option I. It assumes that the student has high school credit in trigonometry, college algebra, and the first semester of general chemistry; is able to earn credit by examination for Chemistry 301; and is able to score well enough on the ALEKS placement examination to take Mathematics 408C or 408N in the first semester of the freshman year. Many students meet some of the following course requirements by credit by examination.

**First year:** Chemistry 302 or 302H, and 317; Mathematics 408C and 408D, or 408N, 408S, and 408M; Physics 301 and 101L, or 303K and 103M, or 317K and 117M (to be taken after Mathematics 408C or 408N); Rhetoric and Writing 306; six semester hours to fulfill core curriculum requirements.

Second year: Chemistry 128K, 128L, 328M, and 328N, or 220C, 320M, and 320N; any coursework needed to meet a core curriculum requirement; three semester hours to be counted toward requirement 4 of the prescribed work; English 316L, 316M, 316N, or 316P; Physics 316 and 116L, or 303L and 103N, or 317L and 117N; an upper-division mathematics course (such as Mathematics 427J or 427K) or an upper-division computer science course.

Third year: Biochemistry 339F or 369, Chemistry 353, 153K, 354L, 456; six semester hours of American and Texas government; six semester hours of American history; three semester hours of electives; a three-semester-hour course to fulfill a core curriculum requirement; three semester hours to be counted toward requirement 4 of the prescribed work.

**Fourth year:** Chemistry 431, 154K, 376K, and courses to fulfill requirement 3 of the prescribed work. The student must also take enough additional coursework to fulfill requirements 4, 5, 9, and 10 of the prescribed work. It is recommended that the majority of the elective courses taken to fulfill requirements 4 and 9 be chosen from upper-division courses in biology, chemistry, chemical engineering, mathematics, and physics.

## Bachelor of Science in Computer Science

The Bachelor of Science in Computer Science degree program provides a strong technical background for students planning to begin careers upon graduation and for those interested in graduate study in computer science. This program allows students to take more coursework in computer science and related technical areas than does the bachelor of arts degree program.

In addition to the three Options leading to the Bachelor of Science in Computer Science, students may apply to Option IV, the Integrated Program, which leads to simultaneous completion of the Bachelor of Science in Computer Science and the Master of Science in Computer Science, the Master of Science in Information Studies, or the Master of Science in Computational Science, Engineering, and Mathematics. The requirements for the Bachelor of Science in Computer Science, Option IV, are given below. The requirements for the Master of Science in Computer Science, the Master of Science in Information Studies, and the Master of Science in Computational Science, Engineering, and Mathematics are described in the *Graduate Catalog* (http://catalog.utexas.edu/ graduate/fields-of-study/natural-sciences/computer-science/degreerequirements).

Students who would like to pursue any of the following Options must first be admitted to the degree program. The admission processes for Options I, II, and IV are described in The Major in Computer Science (p. 641); the admission process for Option III is described in the section Dean's Scholars Honors Program (p. 645).

## **Prescribed Work Common to All Options**

In the process of fulfilling degree requirements, all students must complete:

- 1. Core curriculum
- 2. Skills and experience flags:
  - a. Writing: two flagged courses beyond Rhetoric and Writing 306 or its equivalent, including one at the upper-division level
  - b. Quantitative reasoning: one flagged course
  - c. Global cultures: one flagged course
  - d. Cultural diversity in the United States: one flagged course
  - e. Ethics: one flagged course
  - f. Independent inquiry: one flagged course

Courses that may be used to fulfill flag requirements are identified in the *Course Schedule* (http://registrar.utexas.edu/schedules). They may be used simultaneously to fulfill other requirements, unless otherwise specified. Please note, students may not earn the cultural diversity in the United States and the global cultures flags from the same course. Students are encouraged to discuss options with their academic advisers.

- 3. Options I, II, and IV: One of the following foreign language/culture choices: (Students in Option III and V are exempt from this requirement)
  - a. Beginning level proficiency coursework, or the equivalent, in a foreign language
  - b. First course in a foreign language and a three-semester-hour course in the culture of the same language area
  - c. Two three-semester-hour courses in one foreign culture area. The courses must be chosen from an approved list available in the dean's office and the college advising centers
- 4. At least 42 semester hours of upper-division coursework.
- 5. At least 21 semester hours of upper-division coursework in computer science must be completed in residence at the University.

#### Additional Prescribed Work for Each Option Option I: Computer Science

- 6. Mathematics 408C and 408D, or 408N, 408S, and 408M; either 340L or 341 or Statistics and Data Sciences 329C; and Mathematics 362K or Statistics and Data Sciences 321
- 7. One of the following sequences of coursework:
  - a. Either Biology 311C and 311D, or Biology 315H and 325H
  - b. Chemistry 301 or 301H, and 302 or 302H
  - c. Physics 303K and 103M, 301 and 101L, or 317K and 117M; and 303L and 103N, 316 and 116L, or 317L and 117N
- 8. Three additional hours of majors-level coursework chosen from:
  - a. a different sequence listed in requirement 7
  - b. geological sciences
  - c. upper-division mathematics, excluding Mathematics 325K, 340L, 341, and 362K
- 9. The following courses in computer science:
  - a. Theory: Computer Science 311 or 311H, 331 or 331H, and three additional hours from an approved list available in the department
  - b. Programming: Computer Science 312, 314 or 314H, and three additional hours from an approved list in the department

- c. Systems: Computer Science 429 or 429H, 439 or 439H, and three additional hours from an approved list available in the department
- d. Fifteen additional hours of upper-division courses in computer science
- 10. Enough additional coursework to make a total of 120 semester hours.

#### **Option II: Turing Scholars Honors**

- Mathematics 408C and 408D, or 408N, 408S, and 408M; either 340L or 341 or Statistics and Data Sciences 329C; and Mathematics 362K or Statistics and Data Sciences 321
- 7. One of the following sequences of coursework:
  - a. Either Biology 311C and 311D, or 315H and 325H
  - b. Chemistry 301 or 301H, and 302 or 302H
  - c. Physics 303K and 103M, 301 and 101L, or 317K and 117M; and 303L and 103N, 316 and 116L, or 317L and 117N.
- Three additional hours of majors-level coursework chosen from:
   a different sequence listed in requirement 7
  - b. geological sciences
  - c. upper-division mathematics, excluding Mathematics 325K, 340L, 341, and 362K
- 9. The following courses in computer science:
  - a. Theory: Computer Science 311 or 311H, 331 or 331H, and three additional hours from an approved list available in the department
  - b. Programming: Computer Science 314 or 314H, and three additional hours from an approved list available in the department
  - c. Systems: Computer Science 429 or 429H, 439 or 439H, and three additional hours from an approved list available in the department
  - d. Computer Science 178H and 379H
  - e. Twelve additional hours of upper-division courses in computer science

The courses the student chooses to fulfill requirements a through c must be approved by the Turing Scholars (https://www.cs.utexas.edu/ turing-scholars) program director. In addition to Computer Science 429H, 178H and 379H, at least five upper-division courses chosen to fulfill requirements a through e must be honors courses. The honors thesis the student completes in Computer Science 379H must be approved by the program director.

10. Enough additional coursework to make a total of 120 semester hours

#### **Option III: Computer Science Honors**

- 6. Breadth requirement: An honors mathematics course; Computer Science 311H and 314H; one of the following two-semester sequences: Biology 315H and 325H, Chemistry 301H and 302H, Physics 301, 101L, 316, and 116L; and either an additional three hours chosen from these courses or Physics 315 and 115L. Credit earned by examination may not be counted toward this requirement.
- 7. At least six semester hours of upper-division coursework in mathematics
- 8. Computer Science 429H, 331H, 439H, and 12 additional hours of upper-division coursework in computer science
- 9. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors adviser

- 10. A section of Rhetoric and Writing 309S that is restricted to students in the Dean's Scholars Honors Program
- 11. Computer Science 379H and a three-semester-hour upper-division research course approved by the departmental honors adviser
- 12. Twenty-five additional semester hours of coursework approved by the departmental honors adviser
- 13. Six semester hours of coursework from the College of Liberal Arts and/or the College of Fine Arts
- 14. Enough additional coursework to make a total of 120 semester hours

#### **Option IV: Integrated Program**

- 6. Mathematics 408C and 408D, or 408N, 408S, and 408M; either 340L or 341 or Statistics and Data Sciences 329C; and Mathematics 362K or Statistics and Data Sciences 321
- 7. One of the following sequences of coursework:
  - a. Either Biology 311C and 311D, or Biology 315H and 325H
  - b. Chemistry 301 or 301H, and 302 or 302H
  - c. Physics 303K and 103M, 301 and 101L, or 317K and 117M; and 303L and 103N, 316 and 116L, or 317L and 117N
- 8. Three additional hours of majors-level coursework chosen from:
  - a. a different sequence listed in requirement 7
  - b. geological sciences
  - c. upper-division mathematics, excluding Mathematics 325K, 340L, 341, and 362K
- 9. The following courses in computer science:
  - a. Theory: Computer Science 311 or 311H, 331, or 331H, and three additional hours from an approved list available in the department
  - b. Programming: Computer Science 312, 314 or 314H, and three additional hours from an approved list available in the department
  - c. Systems: Computer Science 429 or 429H, 439 or 439H, and three additional hours from an approved list available in the department
  - d. Nine additional hours of upper-division courses in computer science
- 10. Enough additional coursework to make a total of 120 semester hours

#### **Option V: Teaching (Senior grades)**

- 6. History 329U or Philosophy 329U
- 7. Mathematics 408C and 408D, or 408N, 408S, and 408M; either 340L or 341 or Statistics and Data Sciences 329C
- 8. One of the following sequences of coursework:
  - a. Biology 311C and 311D
  - b. Chemistry 301 or 301H, and 302 or 302H

- c. Physics 303K and 103M, 301 and 101L, or 317K and 117M; and 303L and 103N, 316 and 116L, or 317L and 117N
- 9. The following courses in computer science:
  - a. Theory: Computer Science 311 or 311H, 331 or 331H, and three additional hours from an approved list available in the department
  - Programming: Computer Science 312, 314 or 314H, and three additional hours from an approved list available in the department
  - c. Systems: Computer Science 429 or 429H, 439 or 439H, and three additional hours from an approved list available in the department
- 10. The requirements of one of the following certification areas:
  - a. For computer science certification:
    - i. Mathematics 362K or Statistics and Data Sciences 321
    - ii. An additional sequence chosen from the following:
      - 1. Biology 325 and 337 (Topic 2: Research Methods: UTeach)
      - 2. At least three hours of upper-division coursework in chemistry approved by the undergraduate adviser; and Chemistry 368 (Topic 1: *Research Methods: UTeach*)
      - 3. Physics 315 and 341 (Topic 7: Research Methods: UTeach)
    - iii. Fifteen additional hours of approved computer science upper-division coursework
  - b. For computer science and mathematics certification:
    - i. Mathematics 315C, 333L, 362K, either 360M or 375D, and Statistics and Data Sciences 321
    - ii. Twelve additional hours of approved computer science upper-division coursework.
    - Biology 337 (Topic 2: Research Methods: UTeach), or Chemistry 368 (Topic 1: Research Methods: UTeach), or Physics 341 (Topic 7: Research Methods: UTeach)
- 11. Eighteen semester hours of professional development coursework consisting of:
  - a. Curriculum and Instruction 651S
  - b. Curriculum and Instruction 365C or UTeach-Natural Sciences 350
  - c. Curriculum and Instruction 365D or UTeach-Natural Sciences 355
  - d. Curriculum and Instruction 365E or UTeach-Natural Sciences 360
  - e. UTeach-Natural Sciences 101, 110, and 170

12. Enough additional coursework to make a total of 127 semester hours

#### **Special Requirements**

Students in all Options must fulfill both the University's general requirements (p. 20) for graduation and the college requirements (p. 648). They must also earn a grade of at least *C*- in each mathematics and science course required for the degree, and a grade point average in these courses of at least 2.00. More information about

grades and the grade point average is given in *General Information* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/computation-of-the-grade-point-average).

To graduate and be recommended for certification students who follow the teaching option must have a University grade point average of at least 2.50. They must earn a grade of at least *C*- in the supporting course in requirement 6, and in each of the professional development courses listed in requirement 11 and must pass the final teaching portfolio review. For information about the portfolio review and additional teacher certification requirements, students should consult the UTeach-Natural Sciences academic adviser.

Enrollment in Computer Science 312, 311 or 311H, and 314 or 314H is restricted to computer science entry-level majors. All other computer science courses that may be counted toward a degree in computer science are restricted to students who have been admitted to the computer science major or have the consent of the undergraduate faculty adviser.

An undergraduate may not enroll in any computer science course more than once without written consent of an undergraduate adviser in computer science. No student may enroll in any computer science course more than twice. No student may take more than three upperdivision computer science courses in a semester without written consent of an undergraduate adviser in computer science.

#### Additional Requirements for Option II

Students in Option II, the Turing Scholars program (https:// www.cs.utexas.edu/turing-scholars), must maintain a University grade point average of at least 3.30 and a grade point average in computer science of at least 3.30; in rare circumstances, this grade point average requirement will be waived for students whose honors thesis has been judged by the Department of Computer Science Undergraduate Thesis Committee to be truly outstanding. In addition to this grade point average requirement, students in Option II must know and abide by the academic and disciplinary policies given in this catalog and in the General Information Catalog (http://catalog.utexas.edu/ general-information). Those who fail to do so will be considered for academic dismissal from the Turing Scholars program. Under special circumstances and at the discretion of the director, a student will be allowed to continue in the program under academic review. A student who is academically dismissed from the program may enter another computer science program if he or she fulfills the scholastic standards for continuance in the University given in General Information. Students in scholastic difficulty should discuss their problems with a Turing Scholars program academic adviser and the director.

#### Additional Requirements for Option III

To graduate under Option III, students must remain in good standing in the Dean's Scholars Honors Program, must submit an honors thesis approved by the departmental honors adviser, and present their research in an approved public forum, such as the college's annual Undergraduate Research Forum. More information about the Undergraduate Research Forum is available at https://cns.utexas.edu/.

### Additional Requirements for Option IV Satisfactory Progress

Students are expected to make continuous progress toward the degree by completing required computer science coursework each semester. Those who fail to take program coursework two long-session semesters in a row will be removed from the program and re-enrolled in the Bachelor of Science in Computer Science Option (I, II, or III) that they were following before admission to the Integrated Program (Option IV). Students will be notified before this action is taken; they must meet with their academic adviser upon being notified.

#### Probation

The student is placed on probation if his or her grade point average in required undergraduate computer science courses falls below 3.00. Except with the consent of the undergraduate adviser or the graduate adviser, a student on probation may not take graduate computer science courses.

#### Dismissal

The student is dismissed from the Integrated Program if (1) he or she fails to improve his or her academic performance significantly while on probation, or (2) he or she will not achieve a grade point average of 3.00 even by earning grades of *A* in all remaining required undergraduate computer science and graduate courses.

Like all students, those in the Integrated Program must know and abide by the academic and disciplinary policies given in this catalog and in the *General Information Catalog* (http://catalog.utexas.edu/generalinformation). Those who fail to do so will be considered for academic dismissal from the program. Under special circumstances and at the discretion of the director, a student may be allowed to continue in the program under academic review. A student who is academically dismissed from the program may enter another computer science program if he or she fulfills the scholastic standards for continuance in the University given in the *General Information Catalog* (http:// catalog.utexas.edu/general-information). Students in scholastic difficulty should discuss their problems with an academic adviser and the undergraduate faculty adviser.

#### Graduation

To receive the Bachelor of Science in Computer Science and Master of Science in Computer Science, Master of Science in Information Studies, or Master of Science in Computational Science, Engineering, and Mathematics degrees through the Integrated Program, a student must have a University grade point average of at least 3.00 in the coursework in the Master of Science Program of Work. He or she must also have a grade point average in graduate computer science and information studies, or computational science, engineering, and mathematics coursework of at least 3.00.

#### Order and Choice of Work

The student must consult the faculty adviser each semester regarding order and choice of work.

Note: Computer science courses with numbers ending in *H* are intended for students in Option II, the Turing Scholars program, and Option III, computer science honors. Students outside these Options may enroll in these courses only with the special consent of the honors director.

## Bachelor of Science in Environmental Science

The Bachelor of Science in Environmental Science degree program is designed for students interested in an interdisciplinary scientific perspective on environmental and sustainability issues, analysis, and management. The degree program provides the broad foundation in physical, life, and social sciences needed for a career or graduate study in environmental science and related fields such as climate change, ecology, and conservation. Students who complete the program successfully will be able to assess environmental issues critically from multiple perspectives; to perform field, laboratory, and computer analyses; and to conduct original research. The program is designed to prepare graduates for careers in local, state, and federal government laboratories and nonprofit agencies, environmental consulting firms, environmental education and outreach agencies, and universities and other research settings. The degree is offered by the College of Natural Sciences with a focus on biological sciences, by the College of Liberal Arts with a focus on geographical sciences, and by the Jackson School of Geosciences with a focus on geological sciences. The degree programs share common prescribed work, but each degree has its own specific requirements. Students may earn only one Bachelor of Science in Environmental Science degree from the University.

The Bachelor of Science in Environmental Science curriculum consists of 126 semester hours of coursework. All students must complete the University's Core Curriculum (p. 23). The specific degree requirements consist of prescribed work, major requirements, and electives. In some cases, a course that is required for the degree may also be counted toward the core curriculum.

A course in one prescribed work area may not also be used to fulfill the requirements of another prescribed work area; the only exception to this rule is that a course that fulfills another requirement may also be used to fulfill a flag requirement, unless otherwise specified.

In the process of fulfilling the core curriculum and other degree requirements, all students are expected to complete the following Skills and Experience flags:

- Writing: three flagged courses beyond Rhetoric and Writing 306 or its equivalent; students in the College of Natural Sciences and the Jackson School of Geosciences must complete only two flagged writing courses. For students in the College of Natural Sciences, at least one writing flag must be from an upper-division course.
- 2. Quantitative reasoning: one flagged course
- 3. Global cultures: one flagged course
- 4. Cultural diversity in the United States: one flagged course
- 5. Ethics: one flagged course
- 6. Independent inquiry: one flagged course

#### Prescribed Work Common to All Environmental Science Majors

- 1. Mathematics: Mathematics 408C, or 408N and 408S, or 408K and 408L.
- 2. Chemistry: Chemistry 301 or 301H; 302 or 302H; and 204.
- 3. Physics: Physics 317K and 117M, or another four-hour calculusbased physics sequence.
- 4. Biological Sciences: Biology 311C and 311D, or 315H.
- 5. Ecology:

a. Biology 373 or Marine Science 320. Marine Science 320 may not be used to satisfy both requirement 5a and requirement 10c.b. Biology 373L or Marine Science 120L. Environmental science majors in the College of Natural Sciences must choose Biology 373L.

- 6. Geological Sciences: Geological Sciences 401 or 303, 346C, and an approved geological sciences course in sustainability.
- 7. Geography: Geography 335N.
- 8. Field experience and research methods: Environmental Science 311 and 121.

- 9. Senior field/research experience: one of the following pairs:
  - Environmental Science 271 and 371 or Environmental Science 171 and 471.
  - b. Environmental Science 172C and 472D or Environmental Science 272C and 372D.
  - c. Environmental Science 271 or Marine Science 348, and one of the following: Chemistry 320M, Geography 460G, 368C, 462K, Geological Sciences 327G, Mathematics 408D or 408M. Note: Geography 460G, 462K, and Geological Sciences 327G may not be used to satisfy both requirement 9c and 10b. Biology 277 may substitute for Environmental Science 271 with prior approval of the faculty adviser.
- 10. Environmental and sustainability themes: one course in each of the following thematic areas:
  - a. Environmental and sustainability policy, ethics, and history: Geography 334, 336C, 339K, 340D, 342C, 344K, 356C, Journalism 346F, Marine Science 367K, and Philosophy 325C. Biology 337, Geography 356, 356T, or Sociology 321K may be counted with prior approval of the faculty adviser.
  - b. Geographic information systems: Geography 460G, 462K, Geological Sciences 327G.
  - c. Climates and oceans: Biology 456L, Geography 333K, Geological Sciences 347D, 347G, 377P, Marine Science 320, 440, 352, 354Q, 354T, 356. Marine Science 320 may not be used to satisfy both requirement 5 and requirement 10. Marine Science 356 may not be used to satisfy both requirement 10c and requirement 14 in Option I. Marine Science 356 may not be used to satisfy both requirement 10c and requirement 18 in Option II. Geography 356T, Geological Sciences 371C, and Marine Science 352 may count with prior approval of the faculty adviser.
  - d. Environmental economics, sustainability, and business: Economics 304K, 330T. Advanced Placement credit for Economics 304L may be used to satisfy this requirement.
- 11. Environmental Science 141 and 151.

#### Major Requirements BS EVS: Option I: Biological Science

12. One of the following foreign language/culture choices:

- a. Beginning level proficiency coursework, or the equivalent, in a foreign language.
- b. First course in a foreign language and a three-semester-hour course in the culture of the same language area.
- c. Two three-semester-hour courses in one foreign culture area; the courses must be chosen from an approved list available in the dean's office and the college advising centers.
- 13. Three hours in statistics chosen from Statistics and Data Sciences 328M and 321; with the consent of the undergraduate adviser, an upper-division statistics or probability course may be used to fulfill this requirement.
- 14. Three hours in conservation and environmental biology chosen from Biology 351, 375, and Marine Science 356. Marine Science 356 may not be used to satisfy both requirement 10c and requirement 14. Marine Science 352 may count with prior approval of the faculty adviser.

- Biology 325 or 325H (for students completing Biology 315H), and 370.
- One of the following taxon/systems-based diversity courses or pairs of courses: Biology 321L, 324 and 124L, 327 and 127L, 340L, 448L, 353F, 453L, 354L, 455L, 364, 369L, 471G, Marine Science 352D, 352E, 354C, 354E, 354U, or 357. Biology 337 may count with prior approval of the faculty adviser.
- One of the following physiology, neurobiology, and behavior courses or pairs of courses: Biology 322 and 122L, 328 and 128L, 438L, 339, 345E, 346, 359J, 359K, 359R, 361, 361T, 365S, 371L, Marine Science 355C.
- 18. Complete one upper-division laboratory course in addition to the laboratory requirements in the Prescribed Work Common to All Environmental Science Majors. A laboratory course taken to meet requirement 16 or 17 may be used to fulfill this requirement.
- 19. Enough additional coursework to make a total of 126 hours.

#### **BS EVS: Option II: Biological Sciences Honors**

- 12. To fulfill requirements 1 through 4 of the prescribed work common to all options above, students complete the following breadth requirement: An honors mathematics course; Biology 315H and 325H; Chemistry 301H and 302H; Physics 301 and 101L; and a designated honors statistics course. Credit earned by examination may not be counted toward this requirement.
- 13. Chemistry 204.
- 14. A section of Undergraduate Studies 302 or 303 that is approved by the honors program adviser.
- 15. A section of Rhetoric and Writing 309S that is restricted to student in the Dean's Scholars Honors Program.
- 16. Two semesters of Biology 379H; these courses may be used to fulfill requirement 9.
- 17. Biology 370.
- Three semester hours in conservation and environmental biology chosen from Biology 375, 351, Marine Science 356. Marine Science 356 may not be used to satisfy both requirement 10c and requirement 18.
- One of the following taxon/systems-based diversity courses or pairs of courses: Biology 321L, 324 and 124L, 327 and 127L, 340L, 448L, 353F, 453L, 354L, 455L, 364, 369L, 471G; Marine Science 352 (Topic: *Principles of Estuarine Ecology*), or Marine Science 352 (Topic: *Marine Invertebrates*), 352D, 354C, 354E, 354U or 357. Biology 337 may count with prior approval of the faculty adviser.
- 20. Six semester hours of coursework from the College of Liberal Arts and/or the College of Fine Arts.
- 21. Complete one upper-division laboratory course in addition to the laboratory requirements in the Prescribed Work Common to All Environmental Science Majors. A laboratory course taken to fulfill requirement 19 may be used to fulfill this requirement.
- 22. Enough additional coursework approved by the honors adviser to make a total of 126 semester hours.

#### **Special Requirements**

Students must fulfill both the University's general requirements (p. 20) for graduation and the college requirements (p. 648). They must also earn a grade of at least *C*- in each mathematics and science course required for the degree, and a grade point average in these courses of at least 2.00. More information about grades and the grade point average is given in the *General Information Catalog* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/computation-of-the-grade-point-average).

To graduate under the honors Option, students must remain in good standing in the Dean's Scholars Honors Program, must submit an honors thesis approved by the program honors adviser, and present their research in an approved public forum, such as the college's annual Undergraduate Research Forum. More information about the Undergraduate Research Forum is available at https://cns.utexas.edu/.

## Bachelor of Science in Human Development and Family Sciences

The Bachelor of Science in Human Development and Family Sciences focuses on the study of human development, individuals in a family context, relationships, and well-being within the family and the broader social, economic, community, and governmental environment. Students in the program are expected to develop knowledge and understanding about human development and family dynamics through classroom experiences, observation of children and families, and research. They have opportunities to apply their knowledge through practicum experiences in research and placements in the field. The program is designed to give students excellent preparation for graduate training that leads to careers in academia, research, medicine, and other health professions, as well as for employment in a field involving work with children, families, and adults.

Students seeking the Bachelor of Science in Human Development and Family Sciences must choose one of the six Options described below. Those who plan to follow Option V must be admitted to the Dean's Scholars Honors Program (p. 645) and those who plan to follow Option VI must be admitted to the Honors in Advanced Human Development and Family Sciences Program (p. 646).

#### **Prescribed Work Common to All Options**

In the process of fulfilling degree requirements, all students must complete:

- 1. Core curriculum
- 2. Skills and experience flags:
  - a. Writing: two flagged courses beyond Rhetoric and Writing 306 or its equivalent, including one at the upper-division level
  - b. Quantitative reasoning: one flagged course
  - c. Global cultures: one flagged course
  - d. Cultural diversity in the United States: one flagged course
  - e. Ethics: one flagged course
  - f. Independent inquiry: one flagged course

Courses that may be used to fulfill flag requirements are identified in the *Course Schedule*. They may be used simultaneously to fulfill other requirements, unless otherwise specified. Please note, students may not earn the cultural diversity in the United States and the global cultures flags from the same course. Students are encouraged to discuss options with their academic advisers.

3. Psychology 301; and six semester hours, at least three of which must be upper-division, chosen from courses in economics, social or

cultural anthropology, sociology, and psychology; Psychology 304, 333D, and 339 may not be counted toward this degree.

- 4. At least 36 semester hours of upper-division coursework; at least 21 semester hours must be completed in residence at the University
- 5. Eighteen semester hours in the School of Human Ecology must be completed in residence at the University

#### Additional Prescribed Work for Each Option Option I: Early Childhood

This Option is designed to provide the necessary foundation for further study or a career in working with children in applied settings.

- 6. Statistics and Data Sciences 302; Mathematics 408C, 408N, 408R, or Statistics and Data Sciences 332.
- 7. Chemistry 301 or 301H; Biology 311C; Biology 311D or Chemistry 302 or 302H; and three additional semester hours of coursework in astronomy, biology, chemistry, computer science, geological sciences, mathematics, nutrition (other than Nutrition 306), or physics. Courses designed for non-science majors may not be counted toward this requirement; students should consult the School of Human Ecology for a list of courses that may be counted.
- 8. Nine semester hours from an approved list of supporting courses available from the School of Human Ecology. Students should confer with their advisers about courses appropriate to their career goals
- 9. Nutrition 306; Human Development and Family Sciences 304, 313, 113L, 315L, and 340; six hours chosen from Human Development and Family Sciences 352, 652F, 352L, 652P, and 355R and six additional hours of coursework in human development and family sciences. Registration for Human Development and Family Sciences 352, 652F, 352L, 652P, and 355R is restricted to students whose practicum applications have been approved. Practicum applications are available in the School of Human Ecology advising office; application deadlines are May 1 for enrollment the following spring semester and December 1 for enrollment the following fall semester. If either May 1 or December 1 falls on a weekend or an official University holiday, the application is due the next business day.
- Human Development and Family Sciences 338 and 466; and six additional semester hours chosen from Human Development and Family Sciences 342, 345, 347, 351, 358, 362, 378K (Topic 6: Introduction to Early Childhood Intervention), 378K (Topic 9: Introduction to Child Life), and 378L.
- 11. Enough additional coursework to make a total of 120 semester hours.

#### **Option II: Human Development**

This Option involves the study of development across the life span.

- 6. Statistics and Data Sciences 302; Mathematics 408C, 408N, 408R or Statistics and Data Sciences 332
- 7. Chemistry 301 or 301H; Biology 311C; Biology 311D or Chemistry 302 or 302H; and three additional semester hours of coursework in astronomy, biology, chemistry, computer science, geological sciences, mathematics, nutrition (other than Nutrition 306), or physics. Courses designed for non-science majors may not be counted toward this requirement; students should consult the School of Human Ecology for a list of courses that may be counted.
- 8. Nine semester hours from an approved list of supporting courses available from the School of Human Ecology. Students should confer with their advisers about courses appropriate to their career goals
- Nutrition 306; Human Development and Family Sciences 304, 313, 113L, 315L, and 340; six hours chosen from Human Development and Family Sciences 352, 652F, 352L, 652P, and 355R and six additional hours of coursework in human development and family sciences.

Registration for Human Development and Family Sciences 352, 652F, 352L, 652P, and 355R is restricted to students whose applications have been approved. Applications are available in the School of Human Ecology advising office; application deadlines are May 1 for enrollment the following spring semester and December 1 for enrollment the following fall semester. If either May 1 or December 1 falls on a weekend or an official University holiday, the application is due the next business day.

- Human Development and Family Sciences 378L; six semester hours chosen from Human Development and Family Sciences 335, 351, and 371; and three additional semester hours chosen from Human Development and Family Sciences 335, 342, 343, 345, 351, 353, 358, 466, 371, 372K, and 378K (*Topic 10: Sexuality in Human Development and Family Relationships*).
- 11. Enough additional coursework to make a total of 120 semester hours.

#### **Option III: Families and Personal Relationships**

This Option involves the study of the formation and maintenance of close relationships, especially couple and family relationships.

- 6. Statistics and Data Sciences 302; Mathematics 408C, 408N, 408R, or Statistics and Data Sciences 332
- 7. Chemistry 301 or 301H; Biology 311C; Biology 311D or Chemistry 302 or 302H; and three additional semester hours of coursework in astronomy, biology, chemistry, computer science, geological sciences, mathematics, nutrition (other than Nutrition 306), or physics. Courses designed for non-science majors may not be counted toward this requirement; students should consult the School of Human Ecology for a list of courses that may be counted.
- 8. Nine semester hours from an approved list of supporting courses available from the School of Human Ecology. Students should confer with their advisers about courses appropriate to their career goals
- 9. Nutrition 306; Human Development and Family Sciences 304, 313, 113L, 315L, and 340; six hours chosen from Human Development and Family Sciences 352, 652F, 352L, 652P, and 355R; and six additional hours of coursework in human development and family sciences. Registration for Human Development and Family Sciences 352, 652F, 352L, 652P, and 355R is restricted to students whose applications have been approved. Applications are available in the School of Human Ecology advising office; application deadlines are May 1 for enrollment the following spring semester and December 1 for enrollment the following fall semester. If either May 1 or December 1 falls on a weekend or an official University holiday, the application is due the next business day.
- 10. Human Development and Family Sciences 337, and three hours chosen from Human Development and Family Sciences 335, 372K, and 378K (*Topic 10: Sexuality in Human Development and Family Relationships*).
- 11. Six additional semester hours chosen from Human Development and Family Sciences 322, 335, 345, 347, 353, 358, 360, 371, 372K and 378K (*Topic 10: Sexuality in Human Development and Family Relationships*).
- 12. Enough additional coursework to make a total of 120 semester hours.

#### **Option IV: Families and Society**

This Option involves the study of the family and its interactions with larger socioeconomic systems, such as the economy, work, the media, public policy, and government.

6. Statistics and Data Sciences 302; Mathematics 408C, 408N, 408R, or Statistics and Data Sciences 332.

- 7. Chemistry 301 or 301H; Biology 311C; Biology 311D or Chemistry 302 or 302H; and three additional semester hours of coursework in astronomy, biology, chemistry, computer science, geological sciences, mathematics, nutrition (other than Nutrition 306), or physics. Courses designed for non-science majors may not be counted toward this requirement; students should consult the School of Human Ecology for a list of courses that may be counted.
- 8. Nine semester hours from an approved list of supporting courses available from the School of Human Ecology. Students should confer with their advisers about courses appropriate to their career goals.
- 9. Nutrition 306; Human Development and Family Sciences 304, 313, 113L, 315L, and 340; six hours chosen from Human Development and Family Sciences 352, 652F, 352L, 652P, and 355R; and six additional hours of coursework in human development and family sciences. Registration for Human Development and Family Sciences 352, 652F, 352L, 652P, and 355R is restricted to students whose applications have been approved. Applications are available in the School of Human Ecology advising office; application deadlines are May 1 for enrollment the following spring semester and December 1 for enrollment the following fall semester. If either May 1 or December 1 falls on a weekend or an official University holiday, the application is due the next business day.
- Human Development and Family Sciences 347 and 362; and six additional semester hours chosen from Human Development and Family Sciences 322, 338, 342, 343, 353, 360, and 378K (Topic 6: Introduction to Early Childhood Intervention), 378K (Topic 9: Introduction to Child Life), 378K (Topic 10: Sexuality in Human Development and Family Relationships).
- 11. Enough additional coursework to make a total of 120 semester hours.

## Option V: Human Development and Family Sciences Honors

This Option is designed to prepare students who have been admitted to the Dean's Scholars program for academic or research careers.

- 6. Breadth requirement: A calculus course and a statistics course, one of which must be a designated honors course; Biology 315H and 325H; Chemistry 301H and 302H; and three additional hours of honors-designated or approved coursework in biology, chemistry, computer science, mathematics, statistics and data sciences, or physics; credit earned by examination may not be counted toward this requirement.
- 7. Human Ecology 115H and 225H
- Human Development and Family Sciences 304H, 313H, 113L, 315L, and 18 semester hours chosen from the following: Human Development and Family Sciences 335, 337, 338, 340, 342, 343, 345, 347, 351, 353, 358, 362, 371, 372K, 378L, 378K, and approved social science courses.
- 9. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors adviser.
- 10. A section of Rhetoric and Writing 309S that is restricted to students in the Dean's Scholars Honors Program.
- 11. Human Development and Family Sciences 355H and 379H.
- 12. Ten additional semester hours of coursework approved by the departmental honors adviser.
- 13. Six hours of coursework from the College of Liberal Arts and/or the College of Fine Arts.
- 14. Enough additional coursework to make a total of 120 semester hours.

#### Option VI: Honors in Advanced Human Development and Family Sciences

This Option is designed for highly motivated and talented students who are interested in research experience and training.

- 6. Statistics and Data Sciences 302; Mathematics 408C, 408N, 408R, or Statistics and Data Sciences 332.
- Chemistry 301 or 301H; Biology 311C; and Biology 311D or Chemistry 302 or 302H.
- 8. Three additional semester hours of coursework in astronomy, biology, chemistry, computer science, geological sciences, mathematics, nutrition (other than Nutrition 306), or physics. Courses designed for nonscience majors may not be counted toward this requirement; students should consult the School of Human Ecology for a list of courses that may be counted.
- 9. Human Development and Family Sciences 304H, 313H, 113L, and 315L; 18 semester hours chosen from: Human Development and Family Sciences 335, 337, 338, 340, 342, 343, 345, 347, 351, 353, 358, 362, 371, 372K, 378L, 378K, and approved social science courses.
- 10. Human Development and Family Sciences 355H and 379H.
- 11. Twenty-one semester hours of additional upper-division coursework approved by the departmental honors adviser.
- 12. Enough additional coursework to make a total of 120 semester hours.

#### **Special Requirements**

Students in all Options must fulfill both the University's General Requirements (p. 20) for graduation and the college requirements (p. 648). They must also earn a grade of at least *C*- in each mathematics and science course required for the degree, and grade point average in these courses of at least 2.00. More information about grades and the grade point average is given in the *General Information Catalog* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/computation-of-the-grade-point-average).

To graduate under Option V, students must remain in good standing in the Dean's Scholars Honors Program, must submit an honors thesis approved by the departmental honors adviser, and present their research in an approved public forum, such as the college's annual Undergraduate Research Forum (http://cns.utexas.edu/researchexperience/undergraduate-research/undergraduate-research-forum). More information about the Undergraduate Research Forum is available at https://cns.utexas.edu/.

To graduate under Option VI, students must remain in good standing with an overall in-residence grade point average of at least 3.30 and an overall grade point average of 3.50 in all human development and family sciences courses. In addition, student research conducted in Human Development and Family Sciences 355H and 379H must be presented in an approved public forum, such as the college's annual Undergraduate Research Forum. Students who fail to maintain the required grade point average may be subject to dismissal from the program. Under special circumstances and at the discretion of the human development and family sciences honors adviser, a student may be allowed to continue under academic review.

# Bachelor of Science in Mathematics

As an alternative to the Bachelor of Science and Arts and the Bachelor of Arts degrees, the Bachelor of Science in Mathematics is designed with a twofold purpose: to offer students a more extensive scientific program that may better prepare them for graduate study or employment, and to recognize students who choose to pursue a more demanding program. Students are given the opportunity to develop greater breadth and depth in their mathematical programs as well as to combine mathematics with a concentration in another scientific discipline.

Students seeking the Bachelor of Science in Mathematics select one of the following Options: Actuarial Science, Mathematics for Secondary Teaching, Mathematics Honors, or Mathematics. Students who plan to follow Option VI, mathematics Honors, must be admitted to the Dean's Scholars Honors Program (p. 645).

#### **Prescribed Work Common to All Options**

In the process of fulfilling degree requirements, all students must complete:

- 1. Core curriculum
- 2. Skills and experience flags:
  - a. Writing: two flagged courses beyond Rhetoric and Writing 306 or its equivalent, including one at the upper-division level
  - b. Quantitative reasoning: one flagged course
  - c. Global cultures: one flagged course
  - d. Cultural diversity in the United States: one flagged course
  - e. Ethics: one flagged course
  - f. Independent inquiry: one flagged course

Courses that may be used to fulfill flag requirements are identified in the *Course Schedule* (http://registrar.utexas.edu/schedules). They may be used simultaneously to fulfill other requirements, unless otherwise specified. Please note, students may not earn the cultural diversity in the United States and the global culture flags from the same course. Students are encouraged to discuss options with their academic advisers.

- 3. Forty-two semester hours of upper-division coursework. At least 21 semester hours of upper-division coursework must be completed in residence at the University.
- 4. Eighteen semester hours in mathematics must be completed in residence at the University.

### Additional Prescribed Work for Each Option Option I: Actuarial Science

- 5. Eight semester hours of majors-level coursework in one of the following areas: astronomy, biology, chemistry, geological sciences, and physics.
- 6. Complete one of the following:
  - a. Mathematics 408C\*, 408D, and 427L
  - b. Mathematics 408N, 408S, and 408M
  - Mathematics 408K, 408L, and 408M
     \*Mathematics 408N, and 408S, or 408K and 408L, may substitute for 408C
- 7. Economics 304K and 304L
- 8. Accounting 310F or both 311 and 312
- 9. Finance 357
- 10. Computer Science 303E
- 11. Upper-division mathematics courses, including:

- a. Mathematics 325K or 328K. Mathematics 328K is recommended for students with substantial experience in writing proofs.
- b. Mathematics 341. Mathematics 340L may be substituted for 341 if the course was completed prior to entry into the mathematics entry-level major.
- c. Mathematics 362K, and either 358K or 378K
- d. Mathematics 329F, 339D, 339J, and 339U
- e. Two courses from the following: Mathematics 339V, 339W, 349P
- f. One additional course chosen from the following: Mathematics 339C, 339V, 339W, 349P, 349R, 378K

One of the courses fulfilling requirement 11a through 11f must be taught in the inquiry based learning (IBL) format or with an independent inquiry flag. IBL courses are identified each semester through a notation under the unique number in the course schedule and through a list maintained in the mathematics advising office in Robert Lee Moore Hall, room 4.101. Courses with an independent inquiry flag are identified in the Course Schedule.

- 12. At least six semester hours of upper-division coursework must be outside both mathematics and the fields of study listed in requirement 1. Philosophy courses in logic, computer science courses in discrete mathematics, engineering courses, and actuarial foundation courses may not be used to fulfill this requirement.
- 13. Enough additional coursework to make a total of 120 semester hours.

#### **Option V: Teaching**

This option is designed to fulfill the course requirements for certification as a middle grades or secondary school mathematics teacher in Texas; the student chooses mathematics certification or mathematics, physical science, and engineering certification. However, completion of the course requirements does not guarantee the student's certification. For information about additional certification requirements, students should consult the UTeach-Natural Sciences academic adviser.

Students are encouraged to become familiar with a variety of mathematical software relevant to middle grades or secondary teaching, such as computer geometry systems, spreadsheets, and statistical software. Whenever possible, the student should take courses and sections of courses that use these types of software.

- 5. History 329U or Philosophy 329U
- 6. One of the following sequences:
  - a. Mathematics 408C\* and 408D
  - b. Mathematics 408N and 408S
  - c. Mathematics 408K and 408L

\*Mathematics 408N and 408S, or 408K and 408L, may substitute for 408C

- 7. Mathematics 315C
- Biology 337 (Topic 2: Research Methods: UTeach), Chemistry 368 (Topic 1: Research Methods: UTeach) or Physics 341 (Topic 7: Research Methods: UTeach)
- 9. The requirements of one of the following certification areas:
  - a. For mathematics certification:
    - i. Mathematics 340L or 341
    - Mathematics 325K or 328K, 333L, 358K, and 362K. Mathematics 328K is recommended for students with substantial experience in writing proofs.
    - iii. Mathematics 375D

- iv. Mathematics 361K or 365C
- v. Mathematics 343K or 373K
- vi. Mathematics 427J.
- vii. Two courses chosen from: Mathematics 328K, 339J, 339U, 343K, 343L, 348, 361, 365C, 365D, 368K, 373K, 373L, 378K. A course used to fulfill requirements 9ai through 9avi may not also be counted toward requirement 9avii
- viii. A three-semester-hour supporting course that uses mathematics but is in a field other than mathematics. The following courses may be used to fulfill this requirement: Accounting 310F or 311, Architectural Engineering 323K, Astronomy 307, 352K, 352L, 358, 367M, Chemistry 301 or 301H, 303, Civil Engineering 321, 341, Computer Science 303E, 313E, Economics 420K, Electrical Engineering 302, 366, 366L, Geological Sciences 346C, 354, 476K, Geography 360L, Government 341M, Human Development and Family Sciences 322, Mechanical Engineering 320, 326, 366L, 366Q, 366R, Petroleum and Geosystems Engineering 310, Physics 301, 303K, 303L, Psychology 325K, 332, Sociology 369L
- b. For mathematics, physical science, and engineering certification:
  - i. Mathematics 325K or 328K, 427J, 333L, 341, 358K, and 362K. Mathematics 328K is recommended for students with substantial experience in writing proofs
  - ii. Mathematics 361K or 365C
  - iii. Mathematics 375D
  - iv. Physics 301, 101L, 316, 116L, 315, and 115L
  - v. Chemistry 301 or 301H, 302 or 302H, and 204
  - vi. Engineering Studies 301; and Mechanical Engineering 377K upon approval of the projects by the UTeach Program.
- 10. Eighteen semester hours of professional development coursework consisting of:
  - a. Curriculum and Instruction 651S
  - b. Curriculum and Instruction 365C or UTeach-Natural Sciences 350
  - c. Curriculum and Instruction 365D or UTeach-Natural Sciences 355
  - d. Curriculum and Instruction 365E or UTeach-Natural Sciences 360
  - e. UTeach-Natural Sciences 101, 110, and 170
- Students seeking middle grades certification must complete the following courses: Educational Psychology 350G, or Psychology 301 and 304; and Curriculum and Instruction 339E. Students seeking mathematics, physical science, and engineering certification may not seek middle grade certification.
- 12. Enough additional coursework to make a total of at least 120 semester hours

#### **Option VI: Mathematics Honors**

- 5. Breadth requirement: An honors mathematics course; one of the following two-semester sequences: Biology 315H and 325H, Chemistry 301H and 302H, or Physics 301, 101L, 316, and 116L; and nine additional semester hours chosen from the preceding courses, Physics 315 and 115L. Credit earned by examination may not be counted toward this requirement
- 6. An honors section of Mathematics 427J, and six semester hours of coursework chosen from Mathematics 365C, 367K, and 373K
- 7. Twenty additional semester hours of upper-division coursework in mathematics approved by the departmental faculty adviser
- 8. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors adviser
- 9. A section of Rhetoric and Writing 309S that is restricted to students in the Dean Scholars Honors Program
- 10. Mathematics 379H

- 11. Thirty additional semester hours of coursework approved by the departmental honors adviser
- 12. Six semester hours of coursework from the College of Liberal Arts and/or the College of Fine Arts
- 13. Enough additional coursework to make a total of 120 semester hours.

#### **Option VII: Mathematics**

- Eight semester hours of majors-level coursework in one of the following areas: astronomy, biology, chemistry, geological sciences, and physics
- 6. Computer Science 303E
- 7. One of the following sequences:
  - a. Mathematics 408C\* and 408D
  - b. Mathematics 408N and 408S
  - c. Mathematics 408K and 408L

\*Mathematics 408N and 408S, or 408K and 408L, may substitute for 408C

- 8. Three of the following: Mathematics 408M or 427L, 427J, 341, 362K. Mathematics 340L may be substituted for 341 if the course was taken prior to entry into the mathematics entry-level major
- 9. Mathematics 325K or 328K. Mathematics 328K is recommended for students with substantial experience in writing proofs
- 10. One of the following: Mathematics 343K, 361K, 365C, 367K, 373K.
- Complete 33 hours of upper-division mathematics, from requirements 8, 9, 10, and the following: Mathematics 325K, 427J or 427K, 427L, 328K, 329F, 333L, 339C, 339D, 339J, 339U, 339V, 339W, 340L or 341, 343K, 343L, 344K, 346, 348, 349P, 349R, 358K, 361, 361K, 362K, 362M, 365C, 365D, 365G, 367K, 367L, 368K, 372K, 373K, 373L, 374G, 374M, 375D, 375T, 378K, and 379H. Mathematics 374M may not count toward both requirement 11 and 13.
- 12. One upper-division mathematics course identified as taught in the inquiry based learning (IBL) format or with an independent inquiry flag. IBL courses are identified each semester through a notation under the unique number in the Course Schedule and through a list maintained in the mathematics advising office in Robert Lee Moore Hall, room 4.101. Courses with an independent inquiry flag are identified in the Course Schedule. Courses counted toward requirements 8, 9, 10, and 11 may also count toward this requirement.
- 13. Mathematics in context. One course chosen from:
  - a. Mathematics 374M
  - b. Chemistry 353, 354
  - c. Computer Science 341, 342, 345, 346, 353, 367
  - d. Electrical Engineering 411, 325, 360C, 362K
  - e. Physics 329, 336K, 352K

Courses in requirements 13b through 13e may require additional prerequisites. Mathematics 374M may not count toward both requirement 11 and 13.

- 14. At least six semester hours of upper-division coursework must be outside both mathematics and the fields of study listed in requirement 5. Philosophy courses in logic, computer science courses in discrete mathematics, engineering, and actuarial foundation courses may not be used to fulfill this requirement.
- 15. Enough additional coursework to make a total of 120 semester hours

#### **Special Requirements**

Students in all Options must fulfill both the University's General Requirements (p. 20) for graduation and the college requirements (p. 648). They must also earn a grade of at least *C*- in each mathematics and science course required for the degree, and a grade point average in these courses of at least 2.00. More information about grades and the grade point average is given in the *General Information Catalog* (http://catalog.utexas.edu/general-information).

To graduate and be recommended for certification, students who follow the Teaching Option must have a University grade point average of at least 2.50. They must earn a grade of at least *C*- in the supporting course in requirement 5 and 8 and in each of the professional development courses listed in requirement 10 and must pass the final teaching portfolio review; those seeking middle grades certification must also earn a grade of at least *C*- in each of the courses listed in requirement 11. For information about the portfolio review and additional teacher certification requirements, students should consult the UTeach-Natural Sciences academic adviser.

To graduate under Option VI, students must remain in good standing in the Dean's Scholars Honors Program, must submit an honors thesis approved by the departmental honors adviser, and must present their research in an approved public forum, such as the college's annual Undergraduate Research Forum (http://cns.utexas.edu/researchexperience/undergraduate-research/undergraduate-research-forum).

## Bachelor of Science in Medical Laboratory Science

The student preparing for a career in medical laboratory science completes at least 100 hours of academic work at the University. After this work is completed, the student enters an accredited school of medical laboratory science (or clinical laboratory science) for an additional 12 to 16 months of clinical education. After completion of this education, the student is awarded the Bachelor of Science in Medical Laboratory Science and is eligible to take the national certification examination administered by the American Society for Clinical Pathology (ASCP) Board of Certification (BOC). Successful completion of this exam results in national certification as a Medical Laboratory Scientist.

The purpose of this degree program is to meet the increasing demand for laboratory professionals in hospital and clinic laboratories, research, industry, public health, education, and laboratory management. Medical laboratory science is also an excellent foundation for graduate study in medicine, dentistry, management, education, and other disciplines.

#### **Prescribed Work**

In the process of fulfilling degree requirements, all students must complete:

- 1. Core curriculum
- 2. Skills and experience flags:

a. Writing: two flagged courses beyond Rhetoric and Writing 306 or its equivalent, including one at the upper-division level

- b. Quantitative reasoning: one flagged course
- c. Global cultures: one flagged course
- d. Cultural diversity in the United States: one flagged course
- e. Ethics: one flagged course
- f. Independent inquiry: one flagged course

Courses that may be used to fulfill flag requirements are identified in the *Course Schedule* (http://registrar.utexas.edu/schedules). They may be used simultaneously to fulfill other requirements, unless otherwise

specified. Please note, students may not earn the cultural diversity in the United States and the global cultures flags from the same course. Students are encouraged to discuss options with their academic advisers.

- 3. One of the following foreign language/culture choices:
  - Beginning level proficiency coursework, or the equivalent, in a foreign language.
  - b. First course in a foreign language and a three-semester-hour course in the culture of the same language area.
  - c. Two three-semester-hour courses in one foreign culture area; the courses must be chosen from an approved list available in the dean's office and the college advising centers.
- Mathematics 408C or 408N, and Statistics and Data Sciences 304 or 328M
- 5. Either Biology 311C, 311D, and 325, or Biology 315H and 325H
- Biology 226L, 326M, 330 or 446L, 344 or 366R, 360K, 260L, 361, 361L, and 365S
- 7. Chemistry 301 or 301H, 302 or 302H, 204, 220C, 320M, 320N, and Biochemistry 369
- 8. Computer Science 303E, Management Information Systems 302F, or Public Health 323
- 9. Enough additional elective coursework, if necessary, to make a total of at least 100 semester hours of academic work completed at the University before the clinical education program.
- 10. Twelve to 16 months of clinical education in a program of medical laboratory science (or clinical laboratory science) accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). The student must apply to and be accepted into a clinical education program. The clinical education program director works closely with each student to ensure his or her success in the program. Upon completion of the clinical education program, the student must submit a letter from the program director verifying completion of coursework and a transcript showing grades in all courses in the program to The University of Texas at Austin, Office of the Dean, College of Natural Sciences, 1 University Station G2500, Austin TX 78712. To be counted toward the degree, the coursework must be approved by the faculty adviser for medical laboratory science and the dean. None of the coursework completed in the clinical education program may be used to fulfill in-residence degree requirements, requirements 1 through 9 of the prescribed work above, or the requirements for a second bachelor's degree.

#### **Special Requirements**

Students must fulfill both the University's General Requirements (p. 20) for graduation and the college requirements (p. 648). They must also earn a grade of at least *C*- in each mathematics and science course required for the degree, and a grade point average in these courses of at least 2.00. Students must also earn a grade of at least *C*- in each course taken in the 12 to 16-month clinical education in a program of medical laboratory science (or clinical laboratory science) accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). More information about grades and the grade point average is given in the *General Information Catalog* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/computation-of-the-grade-point-average).

#### Order and Choice of Work

The student should consult with his or her academic and faculty advisers each semester regarding order and choice of work and balancing the laboratory load. To complete the program within four years, it may be necessary for the student to take some courses during the summer.

## Bachelor of Science in Neuroscience

The Bachelor of Science degree in Neuroscience provides a strong foundation in the core sciences and related mathematical disciplines, along with the opportunity for training in biology, chemistry, computer science, mathematics, physics, or psychology. Distinctive features of the program include an emphasis on developing the quantitative, statistical, mathematical, and computational skills required in neuroscience, and meaningful hands-on laboratory experience.

#### **Prescribed Work Common to All Options**

In the process of fulfilling degree requirements, all students must complete:

- 1. Core curriculum
- 2. Skills and experience flags:
  - a. Writing: two flagged courses beyond Rhetoric and Writing 306 or its equivalent, including one at the upper-division level
  - b. Quantitative reasoning: one flagged course
  - c. Global cultures: one flagged course
  - d. Cultural diversity in the United States: one flagged course
  - e. Ethics: one flagged course
  - f. Independent inquiry: one flagged course

Courses that may be used to fulfill flag requirements are identified in the *Course Schedule* (http://registrar.utexas.edu/schedules). They may be used simultaneously to fulfill other requirements, unless otherwise specified. Please note, students may not earn the cultural diversity in the United States and the global cultures flags from the same course. Students are encouraged to discuss options with their academic advisers.

3. At least 21 semester hours of upper-division coursework, including 18 semester hours in biology and neuroscience, must be completed in residence at the University. All students must complete at least 36 semester hours of upper-division coursework.

#### **Option I: Neuroscience Scholars**

- 4. Mathematics 408C, or 408N and 408S; Statistics and Data Sciences 328M
- 5. An eight hour physics sequence chosen from the following:
  - a. Physics 317K, 117M, 317L, and 117N
  - b. Physics 303K, 103M, 303L, and 103N
  - c. Physics 301, 101L, 316, and 116L
- 6. Chemistry 301 or 301H, 302 or 302H, and 204
- 7. Biology 311C and 311D, or 315H and 325H, and 206L
- 8. Three additional majors-level courses selected from one of the following sequences:
  - a. Biology: Biology 325 or 325H, 320, 344, 349, and 370
  - b. Chemistry: Chemistry 328M and 128K, 328N and 128L, 353 or 353M, and Biochemistry 369
  - c. Computer Science: Computer Science 312, 314, Statistics and Data Sciences 335, 374E
  - Mathematics: Mathematics 427J or 427K, 427L, 340L or 341, 362K, 378K, Statistics and Data Sciences 321 or 329C; Mathematics 362K and Statistics and Data Sciences 321 may not both count.
  - e. Physics: Physics 345, 338K, 355
  - f. Psychology: Psychology 301, 323, 353K, 355
- 9. Neuroscience 330

- 10. Neuroscience 335
- Twelve semester hours of laboratory courses chosen from the following: Neuroscience 365L, 366E, 366L, 366N, 366P, 366S, 367W, 377, 466G, and 466M. A maximum of three hours of Neuroscience 377 may count.
- Nine semester hours of upper-division neuroscience to be chosen from: Biology 325, 359K, 367C, Neuroscience 337, 365D, 365T, 365W, 366C, 366D, 367F, 367V, and 371M; Biology 325 or 325H may count toward either requirement 8a or requirement 12
- 13. Three semester hours of Neuroscience 379H, Honors Tutorial Course
- 14. Enough additional coursework to make a total of 120 semester hours

#### **Option II: Neuroscience Honors**

- 4. Breadth requirement: An honors mathematics course; Biology 315H and 325H; Chemistry 301H and 302H; and one of the following: Physics 301 and 101L; or Physics 316 and 116L; credit earned by examination may not be counted toward this requirement.
- 5. Three hours of statistics chosen from the following: Statistics and Data Sciences 321, 325H, or 328M; other statistics courses may be approved by the departmental honors adviser.
- 6. One of the following:
  - a. Physics 315 and 115L
  - b. Physics 316 and 116L
  - c. Physics 338K, 345, 355

Courses counted toward requirement 4 may not also be counted toward requirement 6.

- 7. Biology 206L and Chemistry 204
- 8. Chemistry 128K, 128L, 328M, and 328N
- 9. Biology 320 or 344
- 10. Biology 349 and 370
- 11. Neuroscience 330
- 12. Neuroscience 335
- Six hours of laboratory courses chosen from: Neuroscience 365L, 366E, 366L, 366N, 366P, 366S, 367W, 466G, 466M
- Six hours of upper-division neuroscience chosen from: Biology 359K, 367C, Neuroscience 337, 365D, 365T, 365W, 366C, 366D, 367F, 367V, 371M, 377
- 15. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors adviser
- 16. A section of Rhetoric and Writing 309S that is restricted to students in the Dean's Scholars Honors Program
- 17. Two semesters of Neuroscience 379H
- 18. Seven additional semester hours of coursework approved by the departmental honors adviser
- 19. Six semester hours of coursework from the College of Liberal Arts and/or the College of Fine Arts
- 20. Enough additional coursework to make a total of 120 semester hours

#### **Option III: Neuroscience**

- 4. Mathematics 408C, or 408N and 408S; and Statistics and Data Sciences 328M
- 5. An eight-hour physics sequence chosen from the following:
  - a. Physics 317K, 117M, 317L, and 117N
  - b. Physics 303K, 103M, 303L, and 103N
  - c. Physics 301, 101L, 316, and 116L
- 6. Chemistry 301 or 301H, 302 or 302H, and 204
- 7. Biology 311C, 311D, and 325 or 315H and 325H
- 8. Biology 206L

- 9. Neuroscience 330 and 335
- Fifteen hours of upper-division neuroscience chosen from: Biology 359K, 367C, Neuroscience 337, 365D, 365L, 365T, 365W, 366C, 366D, 366E, 366L, 366N, 366P, 366S, 367F, 367V, 367W, 371M, 377, 466G, 466M. A maximum of six hours of Neuroscience 377 may count.
- Six additional hours of upper-division laboratory course work chosen from the following: Neuroscience 365L, 366E, 366L, 366N, 366P, 366S, 367W, 466G, 466M. Neuroscience 365L, 366E, 366L, 366N, 366P, 366S, 367W, 466G, and 466M may count toward requirement 10 or requirement 11.
- 12. Enough additional coursework to make a total of 120 semester hours

#### **Special Requirements**

Students must fulfill both the University's General Requirements (p. 20) for graduation and the college requirements (p. 648). They must also earn a grade of at least C- in each mathematics and science course required for the degree, and a grade point average in these courses of at least 2.00. More information about grades and the grade point average is given in *General Information* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/computation-of-the-grade-point-average).

To graduate under Option II, students must remain in good standing in the Dean's Scholars Honors Program, must submit an honors thesis approved by the departmental honors adviser, and must present their research in an approved public forum, such as the college's annual Undergraduate Research Forum. More information about the Undergraduate Research Forum is available at https://cns.utexas.edu/ innovative-education/undergraduate-research/undergraduate-research forum.

### **Bachelor of Science in Nutrition**

Nutrition is an integrative science with the overall objective of improving the health and well-being of individuals and groups. Nutritional inquiry encompasses not only the roles of electrons, atoms, molecules, genes, cells, organs, and complex organisms in biological life processes but also the links between life science and health, behavior, education, population, culture, and economics. The Bachelor of Science in Nutrition degree program includes six options, described below.

For students pursuing careers in dietetics, courses in behavioral and clinical nutrition and food systems management provide the academic preparation required for dietetics practice. The Didactic Program in Dietetics (DPD) meets the coursework requirements that qualify graduates to apply to a dietetic internship, which leads to the Registered Dietitian credential. Completion of the Didactic Program in Dietetics requirements qualifies a graduate to apply for the exam to become a Dietetic Technician, Registered. To be eligible to apply for a dietetic internship or to practice as a Registered Dietetic Technician, additional coursework would be required for students earning a degree in Options II-VI. The Coordinated Program in Dietetics (CPD) includes both the coursework and the supervised practice necessary to be eligible to write the examination to become a registered dietitian. The DPD and CPD are accredited by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) of the Academy of Nutrition and Dietetics (AND) 120 S. Riverside Plaza, Suite 2000, Chicago IL 60606, (800) 877-1600.

The Nutritional Sciences Option requires courses in science and research in order to prepare students for graduate study or professional school. Graduates may seek employment in private or publicly funded research programs or, upon completion of graduate study, may engage in college or university teaching or nutrition research. This option also allows students to fulfill requirements for postgraduate study in medicine, dentistry, and other health professions. Additional coursework is needed to be eligible to apply for a dietetic internship or to practice as a Dietetic Technician, Registered.

The Nutrition and Public Health Option III is designed to prepare students for entry-level positions in public health and nutrition at state and other health departments, in research, and in industry. It will equip them for entry into graduate programs in nutrition or other public health disciplines at schools of public health, at graduate schools in the biomedical sciences, and for entry into medical or other health professional schools as well as for those who pursue health and research careers.

Students who plan to follow Option IV must be admitted into the Honors in Advanced Nutritional Sciences Program (p. 646). Students in this option take honors courses in nutrition, research methodology, and writing. In addition, students are encouraged to take honors courses in disciplines outside of nutrition, such as biology, chemistry, and mathematics. Students consult with the departmental honors adviser to develop an individualized and challenging program of study that meets their goals and interests.

Students who plan to follow Option V must be admitted to the Dean's Scholars Honors Program (p. 645). In addition to taking a core of research, writing, and seminar courses in the College of Natural Sciences, students in this option consult with the departmental honors adviser to develop a coherent individual program of rigorous and challenging courses from across the University.

Students in the international nutrition Option gain firsthand knowledge of nutrition issues in other countries through a study abroad experience. Students combine the study of nutrition with a broad range of courses to prepare for experience studying and practicing nutrition in another culture.

#### **Prescribed Work Common to All Options**

In the process of fulfilling degree requirements, all students must complete:

- 1. Core curriculum
- 2. Skills and experience flags:
  - a. Writing: two flagged courses beyond Rhetoric and Writing 306 or its equivalent, including one at the upper-division level
  - b. Quantitative reasoning: one flagged course
  - c. Global cultures: one flagged course
  - d. Cultural diversity in the United States: one flagged course
  - e. Ethics: one flagged course
  - f. Independent inquiry: one flagged course

Courses that may be used to fulfill flag requirements are identified in the *Course Schedule* (http://registrar.utexas.edu/schedules). They may be used simultaneously to fulfill other requirements, unless otherwise specified. Please note, students may not earn the cultural diversity in the United States and the global cultures flags from the same course. Students are encouraged to discuss options with their academic advisers.

 At least 36 semester hours of upper-division coursework, of which at least 24 must be in nutrition. At least 21 semester hours of upperdivision coursework, including 18 semester hours in nutrition, must be completed in residence at the University.

## Additional Prescribed Work for Each Option

#### **Option I: Dietetics**

Students in dietetics may select either the Didactic Program in Dietetics (DPD) or the Coordinated Program in Dietetics (CPD). Students who

complete the DPD with at least four upper-division nutrition courses completed in residence will receive a verification statement that qualifies them to apply for an accredited supervised practice program. DPD graduates who complete an accredited supervised practice program may become active members of the Academy of Nutrition and Dietetics (AND) and are eligible to write the examination to become a registered dietitian.

Students interested in the Coordinated Program in Dietetics (p. 642) must apply for admission after completing 60 semester hours of prerequisite coursework. Upon completing the CPD, which includes approximately 1,200 hours of supervised practice, graduates immediately qualify for active membership in the AND and to write the examination to become a registered dietitian.

Students who are admitted to the CPD should consult the faculty adviser each semester regarding order and choice of work. During the fourth year, the following courses must be taken in the indicated term: *fall semester*: Nutrition 245C; *spring semester*: Nutrition 345M, 372C, 372F, 373S; *summer session*: Nutrition 374C and 374P. Because these courses are taught only once a year, a student who does not take them at the indicated time may be unable to complete the program.

- At least three semester hours chosen from Psychology 301, Sociology 302, Anthropology 302, Economics 304K, 304L, and Human Development and Family Sciences 313 or 313H and 113L
- 5. Mathematics 408C, 408N, or Statistics and Data Sciences 332
- 6. Three semester hours of statistics chosen from Statistics and Data Sciences 302, 304, 306, 325H, and 328M
- 7. Chemistry 301 or 301H, 302 or 302H, 204, 320M, and Biochemistry 369
- 8. Biology 311C or 315H, 325 or 325H, and 365S
- 9. Accounting 310F or 311
- 10. The following core nutrition coursework:
  - a. Nutrition 312 or 312H, 112L or 312R, 326, and 126L; students who complete Nutrition 312H and 312R or Biology 315H and 325H are exempt from Nutrition 326 and 126L; students must complete each course with a grade of at least *C* before progressing to other upper-division nutrition courses
  - b. Nutrition 307, 107L, 338W or 338H, 342, and 343
- 11. Coursework in nutrition, consisting of the following:
  - a. Behavioral and clinical nutrition:
    - i. CPD: Nutrition 315, 218, 118L, 330, 332, 370, and 371
    - ii. DPD: Nutrition 315, 218, 118L, 330, 332, 370, 371, and either Nutrition 337 or 365 (Topic 2: *Nutrition and Genes;* or Topic 4: *Obesity and Metabolic Health*)
  - b. Food systems management: Nutrition 334, 234L, and 355M
  - c. Research:
    - i. CPD: Nutrition 373S
    - ii. DPD: One of the following: Nutrition 324 and 124L, 353, 355 or 355H, 366L, 379H, Statistics and Data Sciences 318, 321, 325H, or 352; with the approval of the faculty undergraduate adviser, DPD students may count Nutrition 352 toward this requirement; Statistics and Data Sciences 325H may not be counted toward both requirement 6 and requirement 11cii.
  - d. Professional development:
    - i. CPD: Nutrition 245C
    - ii. DPD: Nutrition 162
- Students in the CPD must complete an additional 15 semester hours of supervised practice: Nutrition 345M, 372C, 372F, 374C, and 374P
- 13. Enough additional coursework to make a total of 126 semester hours

#### **Option II: Nutritional Sciences**

- At least six semester hours chosen from Psychology 301, Sociology 302, Anthropology 302, Economics 304K, 304L, and Human Development and Family Sciences 313 or 313H, and 113L
- 5. Mathematics 408C, 408N, or Statistics and Data Sciences 332
- 6. Three semester hours of statistics chosen from Statistics and Data Sciences 302, 304, 306, 325H, and 328M
- 7. Chemistry 301 or 301H, 302 or 302H, 204, 220C, 320M, 320N, and Biochemistry 369
- 8. Either Biology 311C, 311D, and 325 or Biology 315H and 325H; Biology 446L and 365S
- 9. Complete one of the following:
  - a. Physics 301 and 101L
  - b. Physics 302K and 102M
  - c. Physics 303K and 103M or
  - d. Physics 317K and 117M
- 10. The following core nutrition coursework:
  - a. Nutrition 312 or 312H, 112L or 312R, 326, and 126L; students who complete Nutrition 312H and 312R or Biology 315H and 325H are exempt from Nutrition 326 and 126L; students must complete each course with a grade of at least *C*-before progressing to other upper-division nutrition courses.
  - b. One of the following: Nutrition 307 and 107L; Biology 326M and 226L; 326R and 226L; Chemistry 455
  - c. Nutrition 337, 338W or 338H, 342, 343 ; and 365 (Topic 2: Nutrition and Genes; or Topic 4: Obesity and Metabolic Health)
- 11. Nine additional semester hours of nutrition, including three hours each from the following areas:
  - a. Nutritional sciences: Nutrition 365 or 370 or 371; the same topic of Nutrition 365 may not be counted both toward this requirement and toward requirement 10c.
  - b. Behavioral and clinical nutrition: Nutrition 315, 218 and 118L, 321, 330, 331, 332, or 370 or 371
  - c. Research: Three semester hours of coursework chosen from Nutrition 355 or 355H, 366L, Biology 325L, 331L, and Biochemistry 369L
- 12. Enough additional coursework to make a total of 126 semester hours

#### **Option III: Nutrition and Public Health**

- Six semester hours chosen from Anthropology 322M (Topic 12: Mexican Immigration Cultural History), Sociology 319, 354K, and 368D
- 5. Three semester hours of Statistics and Data Sciences 302, 304, 306, 325H, and 328M
- 6. One of the following courses: Mathematics 408C, 408N, or Statistics and Data Sciences 332
- 7. Chemistry 301 or 301H, 302 or 302H, 204, 320M, and Biochemistry 369
- 8. Biology 311C or 315H, 325 or 325H, and 365S
- 9. The following core nutrition coursework:
  - a. Nutrition 312 or 312H, 112L or 312R, 326, and 126L; students who complete Nutrition 312H and 312R or Biology 315H and 325H are exempt from Nutrition 326 and 126L; students must complete each course with a grade of at least *C*-before progressing to other upper-division nutrition courses.
  - b. Nutrition 337, 338W or 338H, 342, 343, and 365 (Topic 2: Nutrition and Genes; or Topic 4: Obesity and Metabolic Health)
- Three semester hours of research chosen from Nutrition 324 and 124L, 352, 353, 355, 366L, 379H, and Statistics and Data Sciences 318, 321, 325H, or 352; Statistics and Data Sciences 325H may not count toward both requirement 5 and 10.

- 11. Nine semester hours chosen from Anthropology 432L and 349C, Biology 446L, 361T, and 478L, Classical Civilization 306M, Health Education 352K (Topic 4: *Strategic Health Communication*) and 373, Kinesiology 320 and 424K, and Psychology 332C
- 12. Enough additional coursework to make a total of 120 semester hours

## Option IV: Honors in Advanced Nutritional Sciences

- 4. At least three semester hours chosen from Psychology 301, Sociology 302, Anthropology 302, Economics 304K, 304L, and Human Development and Family Sciences 313 or 313H and 113L
- 5. Mathematics 408C, 408N, Mathematics 408D-AP-H, or Statistics and Data Sciences 332
- 6. Three semester hours of statistics chosen from Statistics and Data Sciences 302, 304, 306, 325H, and 328M
- 7. Chemistry 301 or 301H, 302 or 302H, 204, 320M, 320N, 220C, and Biochemistry 369
- 8. Biology 311C, 311D, and 325 or Biology 315H and 325H; and Biology 365S
- 9. Nutrition 312H, 312R, 338H, 342, 343,and 365 (Topic 2: Nutrition and Genes; or Topic 4: Obesity and Metabolic Health), and 12 additional semester hours of nutrition or related coursework approved by the departmental honors adviser
- 10. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors adviser
- 11. Nutrition 355H and 379H
- 12. Nine semester hours of additional coursework approved by the departmental honors adviser
- 13. Enough additional coursework to make a total of 120 semester hours

#### **Option V: Nutrition Honors**

- 4. Breadth requirement: A calculus course and a statistics course, one of which must be a designated honors course; Biology 315H and 325H; Chemistry 301H and 302H; and three additional hours of honors-designated or approved coursework in biology, chemistry, computer science, mathematics, statistics and data sciences, or physics; credit earned by examination may not be counted toward this requirement.
- 5. At least three semester hours chosen from Psychology 301, Sociology 302, Anthropology 302, Economics 304K, 304L, and Human Development and Family Sciences 313 or 313H and 113L
- 6. Chemistry 204, 320M, and 320N, and Biochemistry 369
- 7. Neuroscience 330 and Biology 365S
- 8. Nutrition 312H, 312R, 338H, 342, 343, and 365 (Topic 2: *Nutrition and Genes*; or Topic 4: *Obesity and Metabolic Health*)
- 9. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors adviser
- 10. A section of Rhetoric and Writing 309S that is restricted to students in the Dean's Scholars Honors Program
- 11. Nutrition 355H and 379H
- 12. Six semester hours of additional coursework in nutrition or related area approved by the departmental honors adviser
- 13. Six semester hours of coursework from the College of Liberal Arts and/or the College of Fine Arts
- 14. Enough additional coursework to make a total of 120 semester hours

#### **Option VI: International Nutrition**

Students in this option must participate for one semester or summer session in a study abroad program in nutrition offered by the University. Students must submit a study abroad application. During the study abroad experience, students complete Nutrition 353, Field Experience in International Nutrition. Additional coursework in nutrition or in the language, culture, or history of the country may be available during the international study experience. All study abroad programs in nutrition must be approved in advance by the international nutrition faculty adviser. A list of other study abroad opportunities in nutrition is maintained in the main office of the School of Human Ecology.

- 4. Economics 304K or 304L, and at least three semester hours chosen from Psychology 301, Sociology 302, and Anthropology 302
- Three semester hours chosen from the following: Geography 339K, 357, Mexican American Studies 307, 318, Sociology 335, 354K
- 6. Second-semester proficiency in a single foreign language
- 7. Mathematics 408C, 408N, or Statistics and Data Sciences 332
- 8. Three semester hours of statistics chosen from Statistics and Data Sciences 302, 304, 306, 325H, and 328M
- 9. Chemistry 301 or 301H, 302 or 302H, 204, 320M, and Biochemistry 369
- 10. Biology 311C or 315H, 325 or 325H, and 365S
- 11. The following core nutrition coursework:
  - a. Nutrition 312 or 312H, 112L or 312R, 326, and 126L. Students who complete Nutrition 312H and 312R or Biology 315H and 325H are exempt from Nutrition 326 and 126L; students must complete each course with a grade of at least *C*-before progressing to other upper-division nutrition courses.
  - b. One of the following four-semester-hour sequences: Nutrition 307 and 107L; Biology 326M and 226L; 326R and 226L
  - c. Nutrition 338W or 338H, 342, and 343
- 12. Nutrition 316, 218, 118L, 321, 331, and 353
- 13. At least nine semester hours, three of which must be upper-division, chosen from one of the following areas:
  - a. Health professions: Chemistry 220C, 320N, Biology 206L, 311D, 326M, 346, Nutrition 337, Nutrition 365 (Topic 2: *Nutrition and Genes*; or Topic 4: *Obesity and Metabolic Health*); Biology 326M may not be counted toward both requirement 11b and requirement 13a.
  - b. Dietetics: Nutrition 315, 330, 332, 370, 371
  - c. Behavioral science: Human Development and Family Sciences 304 or 304H, 313 or 313H, 113L, Psychology 308, 319K, Sociology 308D, 319, 320K, 324K
- 14. Enough additional coursework to make a total of 126 semester hours

#### **Special Requirements**

Students in all options must fulfill both the University's General Requirements (p. 20) for graduation and the college requirements (p. 648). They must also earn a grade of at least *C*- in each mathematics and science course required for the degree, and a grade point average in these courses of at least 2.00. More information about grades and the grade point average is given in the *General Information Catalog* (http://catalog.utexas.edu/general-information/ academic-policies-and-procedures/computation-of-the-grade-point-average).

To graduate under Option IV, students must remain in good standing with an overall grade point average of at least 3.30 and an overall grade point average of 3.50 in all nutritional sciences courses. In addition, student research conducted in courses described in requirement 10 must be presented in an approved public forum, such as the college's annual Undergraduate Research Forum (http://cns.utexas.edu/researchexperience/undergraduate-research/undergraduate-research-forum). Students who fail to maintain the required grade point average may be subject to dismissal from the program. Under special circumstances and at the discretion of the nutritional sciences honors adviser, a student may be allowed to continue under academic review.

To graduate under Option V, students must remain in good standing in the Dean's Scholars Honors Program, must submit an honors thesis approved by the departmental honors adviser, and present their research in an approved public forum, such as the college's annual Undergraduate Research Forum. More information about the Undergraduate Research Forum is available at https://cns.utexas.edu/innovative-education/ undergraduate-research/undergraduate-research-forum.

#### Note:

Nutritional Sciences courses with numbers ending in H are intended for students in Option IV, Honors in Advanced Nutritional Sciences and in Option V, Nutrition Honors. Students outside these options may enroll in these courses with the consent of the nutritional sciences honors adviser.

To be eligible to apply for a dietetic internship or to practice as a Registered Dietetic Technician, additional coursework would be required for students earning a degree in Options II-VI.

## **Bachelor of Science in Physics**

All aspects of the physical universe are of interest to the physicist, who seeks to understand not only the smallest forms of matter and the rich phenomena present in our everyday lives but also the universe itself. Physics has played a critical role in human technological and intellectual development during the twentieth century. The tools of the physicist— observation, imagination, model building, prediction, and deduction— will enable physics to continue this influence into the new century. The Bachelor of Science in Physics degree program is designed to provide the skills, understanding, and outlook required for participation in the discovery of new knowledge about nature.

The Bachelor of Science in Physics program is balanced and broad. It is designed to give the student a strong foundation for graduate study or work in physics and, with additional training, for work in a variety of other areas, such as astronomy, astrophysics, biophysics, chemical physics, computer science, engineering, geophysics, mathematics, medicine, physics teaching, and space sciences. Students who end their formal training with the bachelor's degree may seek employment in industry, in national laboratories, or in teaching; they should consider the options in computation, radiation physics, space sciences, biophysics, and teaching, which augment the broad instruction provided by the basic Bachelor of Science in Physics. For those who plan to teach physics in secondary school, the teaching option provides the courses needed for certification.

Students who plan to follow Option VI, Physics Honors, must be admitted to the Dean's Scholars Honors Program (p. 645).

#### **Prescribed Work Common to All Options**

In the process of fulfilling degree requirements, all students must complete:

- 1. Core curriculum
- 2. Skills and experience flags:
  - a. Writing: two flagged courses beyond Rhetoric and Writing 306 or its equivalent, including one at the upper-division level
  - b. Quantitative reasoning: one flagged course
  - c. Global cultures: one flagged course
  - d. Cultural diversity in the United States: one flagged course
  - e. Ethics: one flagged course
  - f. Independent inquiry: one flagged course

Courses with flags are identified in the *Course Schedule* (http:// registrar.utexas.edu/schedules). They may be used simultaneously to fulfill other requirements, unless otherwise specified.

- Options I–IV and VII: one of the following foreign language/culture choices: (Students in Options V and VI are exempt from this requirement)
  - a. Beginning level proficiency coursework, or the equivalent, in a foreign language
  - b. First course in a foreign language and a three-semester-hour course in the culture of the same language area
  - c. Two three-semester-hour courses in one foreign culture area; the courses must be chosen from an approved list available in the dean's office and the college advising centers
- 4. Thirty-six semester hours of upper-division coursework
- At least 21 semester hours of upper-division coursework, including at least 12 semester hours of upper-division coursework in physics, must be completed in residence at the University

## Prescribed Work Common to All Options for Each

#### **Option I: Physics**

This option is designed to give the student a strong foundation for graduate study or work in physics and for further study or work in a variety of other areas.

- 6. Chemistry 301 or 301H, and 302 or 302H
- Six semester hours in biology, geological sciences, or astronomy; a course may not be used to fulfill this requirement if it cannot be counted toward major requirements in the department that offers it
- 8. Physics 301, 101L, 316, 116L, 315, and 115L
- 9. Mathematics 408C and 408D or the equivalent, 427J or 427K and 427L, and six additional semester hours of upperdivision coursework in mathematics; the following courses are recommended: Mathematics 340L, 361, and 362K; only courses at the level of calculus and above may be counted toward the total number of hours required for the degree
- 10. Physics 336K, 352K, 353L, 355, 362K, 362L, 369, 373, and 474, or their equivalents
- 11. Enough additional coursework to make a total of 126 semester hours

#### **Option II: Computation**

This Option is designed to provide the necessary foundation and handson skill in computation for the student who plans a career or further study in computational physics or computer science. Students who complete this option may simultaneously fulfill some of the requirements of the Scientific Computation and Data Sciences Certificate (p. 692).

- 6. Chemistry 301 or 301H, and 302 or 302H
- Six semester hours in biology, geological sciences, or astronomy; a course may not be used to fulfill this requirement if it cannot be counted toward major requirements in the department that offers it
- 8. Physics 301, 101L, 316, 116L, 315, and 115L
- 9. Mathematics 408C and 408D or the equivalent, 427J or 427K and 427L, and six additional semester hours of upper-division coursework in mathematics or statistics and data sciences; Statistics and Data Sciences 329C and Mathematics 362K are recommended; only courses at the level of calculus and above may be counted toward the total number of hours required for the degree
- Physics 329, 336K, 338K, 352K, 353L, 355, 369, and 373, or their equivalents
- 11. One of the following scientific computation options:

- a. Computer Science 303E; Computer Science 313E or Statistics and Data Sciences 322; and two courses from two of the areas listed below:
  - i. Numerical methods: Chemical Engineering 348, Computer Science 323E, 323H, 367, Mathematics 348, Statistics and Data Sciences 335
  - ii. Statistical methods: Biomedical Engineering 335, Mathematics 358K, 378K
  - Other computing topics: Computer Science 324E, 327E, 329E, 377, Mathematics 346, 362M, 368K, 372K, 376C, Mechanical Engineering 367S, Statistics and Data Sciences 329D, 374C, 374D, 374E
- b. Twelve semester hours chosen from Electrical Engineering 306, 312, 316, 319K, and 422C
- 12. Enough additional coursework to make a total of 126 semester hours

#### **Option III: Radiation Physics**

This Option is designed to provide the necessary foundation for the student who plans a career or further study in nuclear engineering, radiation engineering, or health physics.

- 6. Chemistry 301 or 301H, and 302 or 302H
- Six semester hours in biology, geological sciences, or astronomy; a course may not be used to fulfill this requirement if it cannot be counted toward major requirements in the department that offers it
- 8. Physics 301, 101L, 316, 116L, 315, and 115L
- 9. Mathematics 408C and 408D or the equivalent, 427J or 427K and 427L, and six additional semester hours of upper-division coursework in mathematics; the following courses are recommended: Mathematics 340L, 361, and 362K; only courses at the level of calculus and above may be counted toward the total number of hours required for the degree
- Twenty-four semester hours of upper-division coursework in physics, including Physics 336K, 352K, 353L, 355, 362L, 369, and 373, or their equivalents
- Eighteen semester hours of upper-division coursework in mechanical engineering, consisting of Mechanical Engineering 337C, 337F, 337G, 361E, 361F, and 336P
- 12. Enough additional coursework to make a total of 126 semester hours

#### **Option IV: Space Sciences**

This Option is designed to provide the necessary foundation for the student who plans a career or further study in space sciences.

- 6. Chemistry 301 or 301H, and 302 or 302H
- Six semester hours in biology, geological sciences, or astronomy; a course may not be used to fulfill this requirement if it cannot be counted toward major requirements in the department that offers it
- 8. Physics 301, 101L, 316, 116L, 315, and 115L
- Mathematics 408C and 408D or the equivalent, 427J or 427K and 427L, and six additional semester hours of upper-division coursework in mathematics; the following courses are recommended: Mathematics 340L, 361, and 362K; only courses at the level of calculus and above may be counted toward the total number of hours required for the degree
- 10. Physics 329, 336K, 352K, 353L, 355, 362K, 369, and 373, or their equivalents
- Either 15 semester hours of upper-division coursework in aerospace engineering or 12 hours in aerospace engineering and three additional hours of upper-division coursework in physics
- 12. Enough additional coursework to make a total of 126 semester hours

#### **Option V: Teaching**

This Option is designed to fulfill the course requirements for certification as a middle grades or secondary school science teacher in Texas; the student chooses composite science certification with physics as the primary teaching field, physical sciences certification, physics/ mathematics certification, or mathematics, physical science, and engineering certification. However, completion of the course requirements does not guarantee the student's certification. For information about additional requirements, students should consult the UTeach-Natural Sciences academic adviser.

- 6. Physics 301, 101L, 316, 116L, 315, and 115L
- 7. Mathematics 408C and 408D or the equivalent, 427J or 427K, and 427L
- At least 18 semester hours of upper-division coursework in physics, consisting of Physics 341 (Topic 7: *Research Methods: UTeach*), 353L, 355, and three of the following courses: Physics 329, 333, 336K, 338K, 352K, 373, Science 365; with the consent of the UTeach-Natural Sciences undergraduate adviser, an upper-division physics course that includes a substantial research component may be substituted for Physics 341
- 9. History 329U or Philosophy 329U
- 10. The requirements of one of the following certification areas:
  - a. For composite science certification:
    - i. Biology 311C and 311D
    - ii. Chemistry 301 or 301H and 302 or 302H
    - iii. Six hours of coursework in geological sciences; courses intended for non-science majors may not be counted toward this requirement
    - Enough additional approved coursework in biology, chemistry, or geological sciences to provide the required 12 hours in a second field
  - b. For physical sciences certification:
    - i. Chemistry 301 or 301H, 302 or 302H, 204 or 317, 353, 153K, 154K, 354L, and 455 or 456
    - ii. Three additional hours of upper-division coursework in physics
  - c. For physics/mathematics certification: Mathematics 315C, 325K, 333L, 341 or 340L, 358K, 362K, 360M or 375D
  - d. For mathematics, physical science, and engineering certification: i. Mathematics 315C, 325K, 333L, 358K, and 362K
    - ii. Chemistry 301 or 301H, 302 or 302H, and 204
    - iii. Engineering Studies 301; and Mechanical Engineering 377K upon approval of the project by the UTeach Program.
- 11. Eighteen semester hours of professional development coursework consisting of:
  - a. Curriculum and Instruction 651S
  - b. Curriculum and Instruction 365C or UTeach-Natural Sciences 350
  - c. Curriculum and Instruction 365D or UTeach-Natural Sciences 355
  - d. Curriculum and Instruction 365E or UTeach-Natural Sciences 360
  - e. UTeach-Natural Sciences 101, 110, and 170
- 12. Students seeking middle grades certification must complete the following courses: Educational Psychology 350G, or Psychology 301 and 304; and Curriculum and Instruction 339E
- 13. Enough additional coursework to make a total of at least 126 semester hours

#### **Option VI: Physics Honors**

6. Breadth requirement: Biology 315H and 325H, Chemistry 301H and 302H, and Mathematics 427J and 427L; at least one of the math

courses must be a designated honors section; credit earned by examination may not be counted toward this requirement

- 7. Mathematics 340L and 361
- 8. Physics 301, 101L, 316, 116L, 315, and 115L
- 9. Physics 336K, 352K, 353L, 355, 362K, 362L, 369, 373, and 474
- 10. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors adviser
- 11. A section of Rhetoric and Writing 309S that is restricted to students in the Dean's Scholars Honors Program
- 12. Physics 379H and a three-semester-hour upper-division research course approved by the departmental honors adviser
- 13. Ten additional semester hours of coursework approved by the departmental honors adviser
- Six semester hours of coursework from the College of Liberal Arts and/or the College of Fine Arts
- 15. Enough additional coursework to make a total of 120 semester hours

#### **Option VII: Biophysics**

- 6. Chemistry 301 or 301H and 302 or 302H
- 7. Either Biology 311C, 311D, and 325 or Biology 315H and 325H; Biology 206L
- 8. Physics 301, 101L, 316, 116L, 315, and 115L
- 9. Mathematics 408C and 408D or the equivalent, 427J or 427K and 427L, and six additional semester hours of upperdivision coursework in mathematics; the following courses are recommended: Mathematics 340L, 361, and 362K
- 10. Physics 336K, 345, 352K, 353L, 355, 369, and 373 or their equivalents
- 11. Either Chemistry 320M or 328M, and Biochemistry 369
- 12. Complete one of the following areas: a. Cell Biology: Biology 320
  - b. Microbiology: Biology 326R
  - c. Developmental Biology: Biology 349
  - d. Neurobiology: Neuroscience 371M
  - e. Virology: Biology 330
  - f. Computation: Statistics and Data Sciences 335 and Biology 337J

A list of recommended biology laboratory courses that complement the lecture courses listed in 12a through 12e are available in the advising center and the dean's office.

13. Enough additional coursework to make a total of 126 semester hours

#### **Special Requirements**

Students in all options must fulfill both the University's General Requirements (p. 20) for graduation and the college requirements (p. 648). They must also earn a grade of at least *C*- in each mathematics and science course required for the degree, and a grade point average in these courses of at least 2.00. More information about grades and the grade point average is given in the *General Information Catalog* (http://catalog.utexas.edu/general-information/ academic-policies-and-procedures/computation-of-the-grade-point-average).

To graduate and be recommended for certification, students who follow the Teaching Option must have a University grade point average of at least 2.50. They must earn a grade of at least *C*- in the supporting course in requirement 9 and in each of the professional development courses listed in requirement 11 and must pass the final teaching portfolio review; those seeking middle grades certification must also earn a grade of at least *C*- in each of the courses listed in requirement 12. Information about the portfolio review and additional teacher certification requirements is available from the UTeach-Natural Sciences academic adviser.

To graduate under Option VI, students must remain in good standing in the Dean's Scholars Honors Program, must submit an honors thesis approved by the departmental honors adviser, and present their research in an approved public forum, such as the college's annual Undergraduate Research Forum. More information about the Undergraduate Research Forum is available at https://cns.utexas.edu/innovative-education/ undergraduate-research/undergraduate-research-forum.

## Bachelor of Science in Public Health

The Bachelor of Science in Public Health prepares graduates for entrylevel positions in public health and equips them to pursue certificate and graduate degrees in the field. All of the options offer broad-based training in the five core areas of public health. Option I offers a choice of six areas of specialization.

Students for whom the degree is appropriate include those interested in health careers and in dual graduate degree programs in medicine and public health. The degree is administered by the School of Human Ecology.

Option I students who plan to follow Option III must apply for admission. Admission requirements for Option III is given in The Bachelor of Science in Public Health, Option III. Students who plan to follow Option II must be admitted to the Dean's Scholars Honors Program (p. 645).

#### **Prescribed Work Common to All Options**

In the process of fulfilling degree requirements, all students must complete:

- 1. Foundation courses:
  - a. Public health: Public Health 317
  - b. Microbiology: Biology 326M and 226L
  - c. Nutrition and physiology: Nutrition 312 or 312H, 112L, and Biology 365S
  - d. Social and behavioral sciences: One of the following: Economics 304K, 304L, Psychology 301, Sociology 319, 354K
  - Political science/government: Government 358 or Management 320F
- 2. Public health core\*:
  - a. Biostatistics: Statistics and Data Sciences 328M
  - b. Environmental health sciences: Public Health 338
  - c. Epidemiology: Public Health 354
  - d. Global health: Public Health 334
  - e. Health policy and health systems: Public Health 358D
  - f. Health behavior theory and practice: Public Health 356
- 3. Core curriculum
- 4. Skills and experience flags:
  - a. Writing: two flagged courses beyond Rhetoric and Writing 306 or its equivalent, including one at the upper-division level
  - b. Quantitative reasoning: one flagged course
  - c. Global cultures: one flagged course
  - d. Cultural diversity in the United States: one flagged course
  - e. Ethics: one flagged course
  - f. Independent inquiry: one flagged course

Courses that may be used to fulfill flag requirements are identified in the *Course Schedule* (http://registrar.utexas.edu/schedules). They may be used simultaneously to fulfill other requirements, unless otherwise specified. Please note, students may not earn the cultural diversity in the United States and the global cultures flag from the same course. Students are encouraged to discuss options with their academic advisers.

5. At least 21 semester hours of upper-division coursework must be completed in residence at the University. All students must complete at least 36 semester hours of upper-division coursework.

## Additional Prescribed Work for Each Option

#### **Option I: Public Health**

- 6. Mathematics 408C, 408N, or 408R.
- 7. Biology 311C, 311D, and 325 or Biology 315H and 325H. These courses must be completed before the student progresses to other upper-division biology and upper-division public health courses.
- Chemistry 301 or 301H, 302 or 302H, 204, 320M, and Biochemistry 369.
- At least nine hours from one of the following areas of specialization; courses counted toward requirement 1 may not be used to fulfill this requirement.
  - a. Biostatistics and public health informatics: Biology 321G, Computer Science 303E, 313E, 327E, Geography 460G, Mathematics 408D, 408M, 408S, 340L, 358K, 362K, 362M, 378K,Public Health 320, 323, 341R, Statistics and Data Sciences 332.
  - b. Environmental health sciences: Biology 373, 373L, 375, Civil Engineering 341, 342, 346, 369L, Geological Sciences 302C, 346C, 476K, 476M, Geography 307C, 334L, 339K, 344K, 357, 460G, Marine Science 307, 320, 354Q, Public Health 341R, Urban Studies 315.
  - c. Health policy and management: Economics 304K, 304L, Government 357M (Topic 3: Supreme Court and Public Policy; Topic 4: Civil Liberties; Topic 7: Constitutional Structure of Power; Topic 8: Structure of Individual Liberties), 358, 360N (Topic 10: Introduction to International Relations), 370L (Topic 23: Politics of Health Care), Health and Society 320, Human Development and Family Sciences 362, Management 320F, Philosophy 325L or 325M, 347, Public Affairs 325 (Topic 1: Advanced Seminar in Ethical Leadership), Public Health 341R, Sociology 354K.

Economics 304K and 304L may not count toward both requirement 1d and requirement 9c. Government 358 may not count toward both requirement 1e and requirement 9c. Management 320F may not count toward both requirement 1e and requirement 9c. Sociology 354K may not count toward both requirement 1d and 9c.

- d. Infectious diseases and public health microbiology: Biology 330, 230L, 336, 360K, 260L, 361, 361L, Public Health 341R, 361P.
- e. Nutrition: Nutrition 312R, 315, 321, 331, 337, 338W or 338H, 342, 343,365 (Topic 4: *Obesity and Metabolic Health*), Public Health 341R.
- f. Social and behavioral sciences: Only one advertising, communication, or public relations course may be counted: Advertising 305, 319, 334, 378, Communication Studies 306M, 315M, 332, 332K, 355K, Health Education 329K, 335, 352K (Topic 2: *Psychological Issues in Women's Health*), 360, 370K (Topic 1: *Foundations of Health Promotion I*), 371K, 373, Health and Society 301, 320, Marketing 320F, Public Health 341R, Public Relations 305, Social Work 310, Sociology 319, 322F, 329, 336D, 354K, 369K

Sociology 319 and 354K may not count toward both requirement 1d and requirement 8f.

- 10. One of the following foreign language/culture choices:
  - a. Beginning level proficiency coursework, or the equivalent, in a foreign language
  - b. First course in a foreign language and a three-semester-hour course in the culture of the same language area
  - c. Two three-semester-hour courses in one foreign culture area; the courses must be chosen from an approved list available in the dean's office and the college advising centers
- 11. Enough additional coursework to make a total of 120 semester hours

#### **Option II: Public Health Honors**

- 6. Breadth requirement: An honors mathematics course; Biology 315H and 325H; Chemistry 301H and 302H; credit by examination may not count toward this requirement
- 7. In fulfilling requirement 2a, students must complete an honors statistics course
- 8. Chemistry 204, 320M, and Biochemistry 369
- 9. A section of Undergraduate Studies 302 or 303 that is approved by the program honors adviser
- 10. A section of Rhetoric and Writing 309S that is restricted to students in the Dean's Scholars Honors Program
- 11. Two semesters of Public Health 379H
- 12. Nine additional hours of coursework approved by the departmental honors adviser
- 13. Six semester hours of coursework from the College of Liberal Arts and/or the College of Fine Arts
- 14. Enough additional coursework to make a total of 120 semester hours

#### **Option III: Advanced Program**

This program provides students with a foundation in the natural sciences applied to public health and advanced specialist training in preparation for a leadership position in public health practice. This program leads to the completion of the Bachelor of Science in Public Health and the Master of Public Health, awarded by the School of Public Health at the University of Texas Health Sciences Center at Houston. During the senior year, students complete the first year of the Master of Public Health at the Austin Regional Campus. The second year of the Master of Public Health is completed at one of the five regional campuses in Austin, Brownsville, Dallas, El Paso, Houston, and San Antonio. Upon completion of the first year of the Master of Public Health, coursework may be applied toward Option III requirements. Option III students may apply to graduate upon completion of the Master of Public Health.

- 6. Mathematics 408C, 408N, or 408R.
- Biology 311C, 311D, and 325; or 315H and 325H; these courses must be completed before the student progresses to other upper-division biology and upper-division public health courses
- Chemistry 301 or 301H, 302 or 302H, 204, 320M, and Biochemistry 369
- 9. One of the following foreign language/culture choices:
  - a. Beginning level proficiency coursework, or the equivalent, in a foreign language
  - b. First course in a foreign language and a three-semester-hour course in the culture of the same language area
  - c. Two three-semester-hour courses in one foreign culture area; the courses must be chosen from an approved list available in the dean's office and the college advising centers.
- 10. Enough additional coursework to make a total of 120 semester hours; a maximum of 18 hours of graduate coursework completed

at the School of Public Health at the University of Texas Health Sciences Center may be applied as elective hours toward the Bachelor of Science in Public Health, Option III: Advanced Program, if needed to reach a total of 120 hours.

\* Graduate coursework may not be applied toward the public health core requirements 2a through 2f.

#### **Special Requirements**

Students must fulfill both the University's General Requirements (p. 20) for graduation and the college requirements (p. 648). They must also earn a grade of at least *C*- in each foundation course, public health core course, and mathematics and science course required by the degree, and a grade point average in these courses of at least 2.00. More information about grades and the grade point average is given in the General Information Catalog (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/computation-of-the-grade-point-average).

#### **Additional Requirements for Option II**

To graduate under Option II, students must remain in good academic standing in the Dean's Scholars Program, must submit an honors thesis approved by the departmental honors adviser, and present their research in an approved public forum, such as the college's annual Undergraduate Research Forum (https://cns.utexas.edu/innovativeeducation/undergraduate-research/undergraduate-research-forum).

#### Additional Requirements for Option III

Students admitted to Option III are required to follow the admission schedule and policies of Master of Public Health program at the School of Public Health at The University of Texas Health Sciences Center at Houston. Students are expected to make continuous progress toward the undergraduate and graduate degrees by completing required undergraduate and graduate public health coursework each semester of the fourth year. Students who fail to complete graduate coursework two long-session semesters in a row will be removed from the program and must re-enroll at the University of Texas at Austin to complete the Bachelor of Science in Public Health Option I. Students will be notified prior to removal from the graduate program. Students must earn the Bachelor of Science in Public Health in their fourth year to be eligible to continue in the Master of Public Health program in their fifth year.

# Bachelor of Science in Textiles and Apparel

The Division of Textiles and Apparel is a place to get a broad-based education, well suited for career opportunities. Students in the Division of Textiles and Apparel enjoy a wide range of academic programs and career opportunities. They study the art of design, the science of chemistry and physics, and the application of retail and management principles, through the lens of history. Majors come in three packages: merchandising and consumer sciences; apparel, functional, and technical design; and textile conservation and museum studies. Each program provides hands-on experience with rapidly evolving retail environments, intercultural practices and customs, consumer behavior, apparel and fashion design, computer-aided design, fashion show production and event organization, garment conservation and museum management, and fiber and fabric testing. Capstone retail merchandising and apparel design programs take students to high-profile venues and provide rich opportunities in honors programs. Internships are available to enhance the educational experience and ensure strong career opportunities. Basic research is being conducted in bio-based fibers and specialized fabrics, and 3D technology to address basic human needs.

Research is also conducted involving the effects of change and new technologies on the development and distribution of creative textile products. The Division of Textiles and Apparel is a marvelous place to get a broad-based education, well suited for rewarding career opportunities.

### **Prescribed Work Common to All Options**

In the process of fulfilling degree requirements, all students must complete:

- 1. Core curriculum
- 2. Skills and experience flags:
  - a. Writing: two flagged courses beyond Rhetoric and Writing 306 or its equivalent, including one at the upper-division level
  - b. Quantitative reasoning: one flagged course
  - c. Global cultures: one flagged course
  - d. Cultural diversity in the United States: one flagged course
  - e. Ethics: one flagged course
  - f. Independent inquiry: one flagged course

Courses that may be used to fulfill flag requirements are identified in the *Course Schedule* (http://registrar.utexas.edu/schedules). They may be used simultaneously to fulfill other requirements, unless otherwise specified. Please note, students may not earn the cultural diversity in the United States and the global cultures flags from the same course. Students are encouraged to discuss options with their academic advisers.

### **Prescribed Work for Each Option**

# Option I: Apparel, Functional, and Technical Design

- 3. Mathematics 408C, 408N or Statistics and Data Sciences 332
- 4. One of the following:Statistics and Data Sciences 301, 302, 303, 304, 305, 306, or Educational Psychology 371
- 5. Chemistry 301 or 301H, 302 or 302H, and 204; and Biology 311C
- 6. The following textiles and apparel courses:
  - a. Core Courses: Textiles and Apparel 301, 205, 105L, 313, 214K, 214L, 328, 331, 260L, and 260M; and two of the following courses: Textiles and Apparel 325L, 325M, and 327
  - b. Option courses: Textiles and Apparel 316L, 126, 226L, 350, 352D, 355C, 164K (Topics 1: *Flat Pattern*, 2: *Draping*, and 3: *Advanced Apparel Design*), and 264L (Topic 1: *Flat Pattern*, 2: *Draping*, and 3: *Advanced Apparel Design*)
- 7. Thirty-six semester hours of upper-division coursework, of which at least 18 must be within at least nine must be outside the School of Human Ecology. At least 21 semester hours of upper-division coursework must be taken in residence at the University
- 8. Enough additional coursework to make a total of 120 semester hours

### **Option II: Merchandising and Consumer Sciences**

In addition, students following the merchandising option must complete the following degree-level requirements. In some cases, courses that fulfill degree-level requirements also meet the requirements of the core.

- 3. Mathematics 408C, 408N, or Statistics and Data Sciences 332
- 4. One of the following: Statistics and Data Sciences 301, 302, 303, 304, 305, 306, or Educational Psychology 371
- 5. Chemistry 301 or 301H, 302 or 302H, and 204; and Biology 311C
- 6. Economics 301 or 304K
- 7. The following textiles and apparel courses:
  - a. Core courses: Textiles and Apparel 301, 205, 105L, 313, 214K, 214L, 328, 331, 260L, and 260M; and two of the following courses: Textiles and Apparel 325L, 325M, and 327

- b. Option courses: Textiles and Apparel 316Q, 219C, 119L, 151, 352M, 353, 355P, 361, 376, and 377
- 8. Thirty-six semester hours of upper-division coursework, of which at least 18 must be within and at least nine must be outside the School of Human Ecology. At least 21 semester hours of upper-division coursework must be taken in residence at the University
- 9. Enough additional coursework to make a total of 120 semester hours

#### **Option III: Textiles and Apparel Honors**

- 3. Mathematics 408C, 408N, or Statistics and Data Sciences 332
- Breadth Requirement: An approved calculus course and an approved statistics course (one of these must be honors); Chemistry 301H and 302H; Biology 315H and 325H. Credit earned by examination may not be counted toward this requirement.
- 5. A section of Undergraduate Studies 302 or 303 that is approved by the departmental honors adviser
- 6. A section of Rhetoric and Writing 309S that is restricted to students in the Dean's Scholars Honors Program
- 7. Textiles and Apparel 105L, 205, 327, 328, 260L, and 260M
- 8. Twenty-two semester hours selected from the three streams of textiles and apparel courses with at least three semester hours in each of the streams: apparel, technical, and functional design; merchandising and consumer science; and textile conservation and museum studies, as well as Human Development and Family Sciences 322 with consent of the honors adviser
- Six hours of textiles and apparel, including Textiles and Apparel 379H. In all cases, students will be required to conduct research and write a thesis. In some cases, this thesis will be accompanied by a portfolio of work
- 10. Six additional semester hours from biology, chemistry, computer science, engineering, mathematics or physics. Courses designed for non-science majors may not be counted toward this requirement
- 11. Six semester hours of coursework from the College of Liberal Arts and/or the College of Fine Arts
- Thirty-six semester hours of upper-division coursework. At least 21 semester hours of upper-division coursework must be taken in residence at the University
- 13. Twelve additional semester hours of coursework approved by the departmental honors adviser
- 14. Enough additional coursework to make a total of 120 semester hours

# Option IV: Textile Conservation and Museum Studies

- 3. Mathematics 408C, 408N, or Statistics and Data Sciences 332
- 4. One of the following: Statistics and Data Sciences 301, 302, 303, 304, 305,306, or Educational Psychology 371
- 5. Chemistry 301 or 301H, 302 or 302H, 204, and 320M
- 6. Anthropology 302 and 304
- 7. The following textiles and apparel courses:
  - a. Core courses: Textiles and Apparel 301, 205, 105L, 313, 214K, 214L, 328, 331, 260L, and 260M; and two of the following courses: Textiles and Apparel 325L, 325M, and 327
  - b. Option courses: Textiles and Apparel 219C, 119L, 151, 652C, 354C, 354D, 354E, 354F, and 355D

- 8. Thirty-six semester hours of upper-division coursework, of which at least 18 must be within and at least 12 must be outside the School of Human Ecology
- 9. Enough additional coursework to make a total of 126 semester hours

### **Special Requirements**

Students must fulfill both the University's General Requirements (p. 20) for graduation and the college requirements (p. 648). They must also earn a grade of at least *C*- in each mathematics and science course required for the degree, and a grade point average in these courses of at least 2.00. More information about grades and the grade point average is given in the *General Information Catalog* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/computation-of-the-grade-point-average).

To graduate under Option III, students must remain in good standing in the Dean's Scholars Honors Program (p. 645), must submit an honors thesis approved by the departmental honors adviser, and must present their research in an approved public forum, such as the college's annual Undergraduate Research Forum. More information about the Undergraduate Research Forum is available at https://cns.utexas.edu/ innovative-education/undergraduate-research/undergraduate-research forum.

### Order and Choice of Work

The student should consult the faculty adviser each semester about order and choice of work and balancing the laboratory load. Students should also check prerequisite requirements carefully.

### **Minor and Certificate Programs**

In the College of Natural Sciences, only one transcript-recognized minor or transcript-recognized certificate may be declared per major.

A student who wishes to pursue more than one transcript-recognized minor or transcript-recognized certificate per major must consult with his or her academic adviser to get permission from the College. When considering whether to grant an exception and allow pursuit of another transcript-recognized credential, the academic adviser will take into account the student's long-term education/professional goals and the student's ability to graduate within four years of entering the university.

Students admitted to transcript-recognized certificate and transcriptrecognized minor programs must contact their academic advisers to have approved programs added to their degree audit profiles. This allows progress toward the programs to be tracked and ensures that certificates and minors are added to official transcripts upon graduation, if all requirements are met.

### Minor

The transcript-recognized undergraduate academic minor must be completed in conjunction with an undergraduate degree at The University of Texas at Austin. For more information regarding the requirements for achieving a minor, including a comprehensive list of minors, please visit the Minors and Certificate Programs (p. 13) section of the Undergraduate Catalog.

### **Certificate Programs**

Undergraduate certificate programs encourage students to explore academic areas that support and extend their degree plans. The following certificates require at least 18 semester hours of coursework, some of which may also be used to fulfill degree requirements. Undergraduates who complete the certificate requirements in conjunction with their degree requirements or within one year after earning the degree will receive a certificate and recognition on their University transcript. A maximum of nine hours in the certificate program may be taken after completion of the undergraduate degree. At least half of the required coursework in the certificate program must be completed in residence at the University.

### Applied Statistical Modeling Certificate

The certificate in Applied Statistical Modeling equips undergraduate students with the tools necessary to understand how to apply statistics to their primary field of study. This certificate program is designed to complement diverse degree programs and to appeal to students across the University in engineering, science, economics, mathematics, and many other disciplines. Certificate students will complete one course in the mathematical foundations of statistics, a two-course sequence in applied statistics, and nine additional hours in statistics, machine learning, econometrics, and other relevant courses from the approved list below.

Admission to the certificate is by application only. Students may download an application from the Department of Statistics and Data Sciences webpage. Students seeking the certificate must also complete the prerequisite course Mathematics 408C, 408L, 408N, 408R, or 408S with a grade of at least *C*-.

The certificate consists of 18 hours. Students must receive a grade of at least *C* in each course applied toward the certificate and have a cumulative grade point average of at least 3.0 in the courses presented to fulfill the certificate. Courses that appear in multiple approved course lists may be used to satisfy only one requirement. Students must contact the Department of Statistics and Data Sciences to apply for the certificate in the semester in which they are completing the requirements and graduating.

Requirements		Hours	
Mathematical foundation	n of statistics		3
E E 351K	Probability and Random Processes		
M 362K	Probability I		
SDS 321	Introduction to Probability and Statistics		
Sequence in applied stat	istics		6
Choose one of the follow	/ing:		
ECO 329	Economic Statistics		
EDP 371	Introduction to Statistics		
M 358K	Applied Statistics		
PSY 418	Statistics and Research Design		
SOC 317L	Introduction to Social Statistics		
STA 309	Elementary Business Statistics		
SDS 302	Data Analysis for the Health Sciences		
SDS 304	Statistics in Health Care		
SDS 306	Statistics in Market Analysis		
SDS 328M	Biostatistics		
And one of the following	:		
ECO 341K	Introduction to Econometrics		
M 349R	Applied Regression and Time Series	6	
STA 371G	Statistics and Modeling		
STA 371H	Statistics and Modeling: Honors		
STA 375	Statistics and Modeling for Finance		
SDS 325H	Honors Statistics		
SDS 332	Statistical Models for the Health and Behavioral Sciences		

SDS 352	Statistical Methods	
SDS 358	Special Topics in Statistics (Topic 1: Applied Regression Analysis)	
Nine hours of coursewor	k out of the following: <sup>1</sup>	9
ADV 344K	Advertising Research	
C S 343	Artificial Intelligence	
CMS 348	Communication Research Methods	
ECO 354K	Introductory Game Theory	
GEO 325K	Computational Methods	
GEO 365N	Seismic Data Processing	
HED 343	Foundations of Epidemiology	
HED 373	Evaluation and Research Design	
KIN 376	Measurement in Kinesiology	
M 339J	Probability Models with Actuarial Applications	
M 349P	Actuarial Statistical Estimates	
M 362M	Introduction to Stochastic Processes	
M 378K	Introduction to Mathematical Statistics	
or SDS 378	Introduction to Mathematical Statistics	
PBH 354	Epidemiology	
PGE 378	Applied Reservoir Characterization	
PSY 325K	Advanced Statistics	
SDS 323	Statistical Learning and Inference	
SDS 348	Computational Biology and Bioinformatics	
SDS 353	Advanced Multivariate Modeling	
SDS 358	Special Topics in Statistics	
SDS 374E	Visualization and Data Analysis for Science and Engineering	
SDS 375	Special Topics in Scientific Computation	
SDS 379R	Undergraduate Research	
STA 372	Topics in Statistics (Topic 5: Financial and Econometric Time Series Modeling)	
Please Note:		

#### Please Note:

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Statistics and Data Sciences 358 (Topic 1: Applied Regression Analysis) may only be counted toward one requirement.

1. Students are encouraged to select courses within their own majors or colleges as appropriate. The Statistics and Data Sciences courses listed are available to students in all majors.

# Computational Science and Engineering Certificate

The Computational Science and Engineering Certificate program is sponsored by the Cockrell School of Engineering, the Jackson School of Geosciences, the College of Liberal Arts, and the College of Natural Sciences; it is administered by the Institute for Computational Engineering and Sciences (ICES). Information regarding the specific requirements of the Certificate can be found in the Cockrell School of Engineering's Minor and Certificates section (p. 227) of the Undergraduate Catalog.

# The Elements of Computing Program Certificate

The Elements of Computing Program, administered by the Department of Computer Science, is designed to support computational work in disciplines other than computer science and to provide students with skills in the use of computer applications. Any non-computer science major may take any elements of computing course for which he or she meets the prerequisite. No application process is required.

To earn the Elements of Computing Certificate, students must complete 18 semester hours of coursework with a grade of at least *C*- in each course.

The following coursework is required:

Requirements		Hours	
C S 303E	Elements of Computers and Programming (or the equivalent)		3
C S 313E	Elements of Software Design (or the equivalent)		3
Four of the following cou	irses:		12
C S 320N	Topics in Computer Science for Nonmajors		
C S 324E	Elements of Graphics and Visualization		
C S 326E	Elements of Networking		
C S 327E	Elements of Databases		
C S 328E	Topics in Elements of Computing		
C S 329E	Advanced Topics in Elements of Computing		

Please Note:

With the approval of the certificate program faculty committee, other appropriate courses may be counted toward the elective requirement.

### **Evidence and Inquiry Certificate**

The Evidence and Inquiry Certificate, pursued by students in the Polymathic Scholars Program and open by application to others, allows students to design an area of study shaped by questions that require evidence and methodologies outside their major. Students work with faculty to identify interests, map them onto academic disciplines at the University, and determine questions related to those interests that might be answerable by research that combines expertise from at least two disciplines. Students describe their area of study, identify primary questions, name two University of Texas at Austin faculty members with research experience relevant to their field, and justify the courses they would take in a written proposal that must be reviewed by three members of the program's faculty steering committee. Students complete an original research thesis in their final year. Those who plan to pursue the certificate must apply no later than the end of their third long semester. More information about the Evidence and Inquiry Certificate is available on the College of Natural Sciences website (http://cns.utexas.edu/ students/degrees-majors-advising/graduation).

The certificate program requires 22 semester hours of coursework, including at least 11 hours completed in residence. Students must meet the following requirements:

	Requirements		Hours	
	UGS 303	First-Year Signature Course ((Topic: Originality in the Arts and Sciences) or another critical thinking or research methods substitute course for students who apply for admission after completing a signature course.)		3
	NSC 109	Topics in Natural Science (Topic 4: Polymathic Capstone Field Invention)		1
C		including at least six semester hours vork, from the student's approved a of study		12
	Senior Capstone Sequen	ce		6
	NSC 323	Natural Sciences Topics (Topic 1: Polymathic Capstone Thesis Preparation Seminar)		
	NSC 371	Capstone Thesis Seminar		

In the College of Natural Sciences, the Evidence and Inquiry Certificate may be used to complement any major. Some certificate courses will also fulfill degree requirements established by the student's major department and are given later in this section; however, some of the 22 hours required for the certificate may be in addition to the number of hours required for the degree.

### Food and Society Certificate

Though food-related issues vary widely in focus, they are all linked by their complexity and are deeply interdisciplinary nature, each relating to topics of health and nutrition, genetics, politics, culture, the environment, economics, and business. Students will be able to appreciate the full range of these interdisciplinary ties and apply new perspectives to their primary academic majors and careers.

Students completing the certificate will be able to apply a more comprehensive understanding of the implications of their food-related actions and decisions; find better solutions to today's complex problems; formulate more effective public policy; become better informed and active citizens; and make healthier choices for themselves and their families.

No admission to the certificate is required. Students must contact the advising office in the School of Human Ecology to apply for the certificate the semester before the certificate requirements are met. The certificate consists of 18 hours, of which nine hours must be in upper-division coursework. Courses must be completed with minimum grades of at least *C*- unless the course is offered only on the pass/fail basis. Students also seeking the Bachelor of Science in Nutrition may count a maximum of six hours in nutrition toward the food and society certificate.

Some of the courses may contain prerequisites that are in addition to the coursework for the certificate.

Requirements		Hours	
Three hours of introductory nutrition chosen from the following:			3
5			
NTR 306	Fundamentals of Nutrition		
NTR 312	Introduction to Nutritional Sciences		
NTR 312H	Introduction to Nutritional		
	Sciences: Honors		
Fifteen hours selected fi	om a minimum of two themes		15

Fifteen hours selected from a minimum of two themes chosen from table 1, 2 and 3 below. <sup>1</sup>

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1. No more than nine hours in a single theme may be applied toward the certificate.

1. Nutrition and Health

Requirements		Hours	
NTR 218 & NTR 118L	Assessment of Nutritional Status and Assessment of Nutritional Status Laboratory		3
NTR 307	Introductory Food Science		3
NTR 315	Nutrition through the Life Cycle		3
NTR 330	Nutrition Education and Counseling		3
NTR 321	International Nutrition: The Developing World		3
NTR 334	Foodservice Systems Management		3
NTR 353	Field Experience in International Nutrition		3
NTR 365	Selected Topics in Nutritional Sciences (Topic 4: Obesity and Metabolic Health)		3
SOC 308S	Introduction to Health and Society		3
N 309	Global Health		3

2. Culture and History

Requirements		Hours	
NTR 316	Culture and Food		3
AMS 370	Seminar in American Culture (Topic 26: American Food)		3
ANT 307	Culture and Communication		3
ANS 379	Capstone Seminars in Asian Studies (Topic 7: Cuisine and Culture in Asia)		3
C C 340	Advanced Topics in Classical Archaeology (Topic 6: Food, Health, and Culture in the Ancient Mediterranean)		3
C C 348	Topics in Ancient Civilization (Topic 14: Ancient Greek Medicine)		3

3. Politics, Economics, and Environment

	Hours	
International Nutrition: Social and Environmental Policies		3
Community Nutrition		3
Nature, Society, and Adaptation		3
Global Food, Farming, and Hunger		3
Environment, Development, and Food Production		3
Topics in American Government and Politics (Topic 21: Politics of Food in America)		3
Humans and a Changing Ocean		3
Human Exploration and Exploitation of the Sea		3
	Environmental Policies Community Nutrition Nature, Society, and Adaptation Global Food, Farming, and Hunger Environment, Development, and Food Production Topics in American Government and Politics (Topic 21: Politics of Food in America) Humans and a Changing Ocean Human Exploration and Exploitation	International Nutrition: Social and Environmental Policies Community Nutrition Nature, Society, and Adaptation Global Food, Farming, and Hunger Environment, Development, and Food Production Topics in American Government and Politics (Topic 21: Politics of Food in America) Humans and a Changing Ocean Human Exploration and Exploitation

### Forensic Science Certificate

The Forensic Science Certificate provides an interdisciplinary perspective for students interested in careers in forensic science.

Students seeking employment in forensic science laboratories upon graduation are encouraged to select biology and chemistry courses. Some of these courses may require introductory biology and chemistry courses as prerequisites.

Students must apply online for admission to the certificate through the university-wide portal for transcript-recognized certificates as soon as they decide to pursue the certificate. The certificate consists of 18 hours, including six upper-division hours, with grades of at least C-:

Requirements		Hours	
ANT 301	Biological Anthropology		3
Six hours chosen from a	ny of the following courses relevant		6
to forensic science:			
Criminalistics:			
SOC 302	Introduction to the Study of Society		
SOC 325K	Criminology		
SOC 325L	Sociology of Criminal Justice		
SOC 336P	Social Psychology and the Law		
Behavioral Science:			
PSY 301	Introduction to Psychology		
PSY 308	Biopsychology		
PSY 319K	Social Psychology		
PSY 352	Abnormal Psychology		
Pharmacology:			
NEU 365D	Principles of Drug Action		
Forensic Science:			
ANT 366	Anatomy and Biology of the Human		
	Skeleton		
Nine hours chosen from	any of the following areas:		9
Anatomy and Physiology	r.		
ANT 432L	Primate Anatomy		
BIO 309D	The Human Body		
or BIO 365S	Human Systems Physiology		
BIO 446L	Human Microscopic and Gross Anatomy		
BIO 361T	Comparative Animal Physiology		
BIO 165U	Human Systems Physiology Laboratory		
BIO 371L	Experimental Physiology		
Chemistry:			
BCH 369	Fundamentals of Biochemistry		
CH 220C	Organic Chemistry Laboratory		
CH 320M	Organic Chemistry I		
CH 320N	Organic Chemistry II		
CH 455	Fundamentals of Analytical Chemistry		
Genetics and Microbiolo	gy:		
ANT 349C	Human Variation		
ANT 349D	Anthropological Genetics		
BIO 325	Genetics		
BIO 325L	Laboratory Experience in Genetics		
BIO 325T	Human Genetics		
BIO 226L	General Microbiology Laboratory		

BIO 326R	General Microbiology	
Statistics and Computed following):	utation (One course chosen from the	
BIO 321G	Principles of Computational Biology	
SDS 301	Elementary Statistical Methods	

	SDS 301	Elementary Statistical Methods
	SDS 302	Data Analysis for the Health
		Sciences
	SDS 304	Statistics in Health Care
	SDS 306	Statistics in Market Analysis
	SDS 328M	Biostatistics
4	Additional coursework fr	om the criminalistics, behavioral

Additional coursework from the criminalistics, behavioral science and forensic science sections above. <sup>1</sup>

1. A course may not count toward both the six-hour requirement and the 9-hour requirement

### **Marine Science Certificate**

The Marine Science transcript-recognized certificate enables students to explore the field of marine science. The certificate provides a foundation of basic competency in the fundamentals of marine science, along with specialized upper-division coursework in aquatic science. The knowledge of aquatic science that students gain through the certificate will help them to be competitive for employment or graduate study in this field.

The certificate consists of a minimum of 19 hours with grades of at least C-. Most of the courses in the certificate contain prerequisites of one year of general biology and one year of general chemistry.

Marine and Freshwater Biology and Marine and Freshwater Science majors are not eligible to earn the certificate. Environmental Science majors may count no more than nine hours of degree requirements toward the Marine Science certificate.

Requirements		Hours	
MNS 310	Fundamentals of Marine Science		3
MNS 320	Marine Ecology		3
MNS 120L	Laboratory Studies in Marine Ecology		1
Three hours chosen from	1:		3
BIO 311C	Introductory Biology I		
BIO 311D	Introductory Biology II		
BIO 315H	Advanced Introduction to Genetics: Honors		
CH 301	Principles of Chemistry I		
CH 301H	Principles of Chemistry I: Honors		
CH 302	Principles of Chemistry II		
CH 302H	Principles of Chemistry II: Honors		
	wing, including at least six hours at ute in Port Aransas, Texas:		9
MNS 440	Limnology and Oceanography		
MNS 152L	Principles of Marine Science: Laboratory Studies		
MNS 252L	Principles of Marine Science: Laboratory Studies		
MNS 152S	Principles of Marine Science: Undergraduate Seminar		
MNS 252S	Principles of Marine Science: Undergraduate Seminar		
MNS 152T	Principles of Marine Science: Special Topics		

MNS 252T	Principles of Marine Science: Special Topics
MNS 348	Training Cruise(s) (Topic 1: Training Cruise(s): Research in Biological Oceanography )
MNS 352	Principles of Marine Science
MNS 352C	Estuarine Ecology
MNS 352D	Marine Botany
MNS 352E	Marine Conservation Biology
MNS 353	Topics in Marine Science
MNS 354	Marine Invertebrates
MNS 354C	Biology of Fishes
MNS 354E	Aquatic Microbiology
MNS 354J	Marine Chemistry
MNS 354Q	Marine Environmental Science
MNS 354T	Biological Oceanography
MNS 354U	Biology of Sharks, Skates, and Rays
MNS 355C	Physiology of Fishes
MNS 356	Ecosystem Oceanography
MNS 357	Marine Phytoplankton Diversity
MNS 367K	Human Exploration and Exploitation of the Sea
MNS 170	Special Studies in Marine Science
MNS 270	Special Studies in Marine Science
MNS 370	Special Studies in Marine Science

### **Pre-Health Professions Certificate**

The Pre-Health Professions Certificate assists students in preparing for post-baccalaureate, healthcare professional programs. The certificate consists of a minimum of 18 hours, including nine hours in residence. Each course presented for the certificate must be completed with a grade of at least *C*-.

The certificate is composed of two separate tracks: a track for majors in the College of Natural Sciences, and a track for majors in other colleges across the university. Students must apply online for admission to the certificate through the university-wide portal for transcript recognized certificates.

Students are encouraged to work closely with the Health Professions Office to select healthcare themes relevant to their professional career goals. Some of the courses may contain prerequisites that are in addition to the coursework for the certificate.

Majors in the College of Natural Sciences must seek the Science Major Track.

Majors outside of the College of Natural Sciences must seek the Non-Science Major Track. The composition of the non-science major track is science coursework necessary for admission to post-baccalaureate, healthcare professional programs. Non-science majors may apply to the certificate program upon completion of the following courses with grades of at least *B*-: Chemistry 301 or 302, and one of the following: Statistics and Data Sciences 302, Mathematics 408C, 408K, 408N, or 408R. Upon admission, the ability to progress in the certificate is dependent on completion of the certificate courses with satisfactory grades.

### **Science Major Track**

R	lequirements		Hours	
	complete 18 hours chose elevant to healthcare.	en from the following themes		18
С	cultural Awareness:			
	AAS 301	Introduction to Asian American Studies		
	AAS 310	Introductory Topics in Asian American Studies (Topic 1: Psychological Perspectives on Asian American Identity)		
	AFR 301	African American Culture		
	AFR 374D	Advanced Topics in Black United States Studies (Topic 11: Psychology of the African American Experience)		
	AMS 370	Seminar in American Culture (Topic 49: Twentieth-Century United States Lesbian and Gay History)		
	CSD 308K	Perspectives on Deafness		
	LAS 324L	Topics in Latin American Anthropology (Topic 16: Mexican Immigration Cultural History)		
	MAS 307	Introduction to Mexican American Cultural Studies		
	MES 301L	Introduction to the Middle East: Adjustment and Change in Modern Times		
H	lealth and Anatomy:			
	ARH 339R	Art, Art History, and Medicine		
	C C 306M	Introduction to Medical and Scientific Terminology		
	CSD 306K	Introduction to Communication Disorders		
	EDP 350L	Human Sexuality		
	or HED 366	Human Sexuality		
	or PSY 346K	Psychology of Sex		
	HED 335	Theories of Substance Use and Abuse		
	HED 343	Foundations of Epidemiology		
	HED 352K	Studies in Health: Topical Studies		
	HED 370K	Topical Seminar in Health Promotion		
	HED 373	Evaluation and Research Design		
	KIN 320	Applied Biomechanics of Human Movement		
	KIN 424K	Applied Human Anatomy		
	KIN 425K	Physiology of Exercise		
	KIN 326K	Biomechanical Analysis of Movement		
	PSY 301	Introduction to Psychology		
	PSY 308	Biopsychology		
	PSY 332C	Hormones and Behavior		
	PSY 341K	Selected Topics in Psychology (Topic 4: Health Psychology)		
	PSY 353K	Psychopharmacology		
H	lealthcare Policy:			
	CMS 322E	Communication Ethics		

GRG 344K	Global Food, Farming, and Hunger	SOC 333K	Sociology of Gender
GRG 356	Topics in Environmental Geography	HED 329K	Child and Adolescent Health
	(Topic 1: Children's Environmental Health)	S W 360K	Current Social Work Topics (Topic 9: Loss and Grief: Individual, Family,
GRG 356T	Topics in Geography (Topic		and Cultural Perspectives)
	9: Human Health and the Environment)	Nutrition:	
GRG 357	,	CMS 322E	Communication Ethics
HED 378D	Medical Geography Peer Health Leadership I	HIS 350R	Undergraduate Seminar in United
HIS 350R	Undergraduate Seminar in United		States History (Topic 5: American Cultural History of Alcohol and
HI3 330h	States History (Topic 18: Women in		Drugs)
	Sickness and Health)	NTR 306	Fundamentals of Nutrition
MAN 334M	Healthcare System Management	NTR 312	Introduction to Nutritional Sciences
N 309	Global Health	NTR 315	Nutrition through the Life Cycle
N 321	Ethics of Health Care	NTR 218	Assessment of Nutritional Status
PBH 317	Introduction to Public Health	NTR 321	International Nutrition: The
PHL 325M	Medicine, Ethics, and Society		Developing World
SOC 307P	Introduction to the Sociology of Health and Well-Being	NTR 326	Intermediate Nutrition and Metabolism
SOC 319	Introduction to Social Demography	NTR 331	International Nutrition: Social and
SOC 321G	Global Health Issues and Health		Environmental Policies
	Systems	NTR 332	Community Nutrition
SOC 336D	Race, Class, and Health	Ontional: If additiona	I hours are needed to complete the 18 hours for the
SOC 354K	Sociology of Health and Illness		In of nine hours chosen from the following may be
SOC 358D	Health Policy and Health Systems	applied to the scienc	
SOC 368D	Social Context of Public Health		
SOC 369K	Population and Society	Requirements	Hours
URB 350	Topics in Urban Politics and	Biochemistry and Ch	-
	Governance (Topic 2: Human	BCH 369	Fundamentals of Biochemistry
Liver and Casistal (	Health and the Environment)	CH 220C	Organic Chemistry Laboratory
Human and Societal	•	CH 320M	Organic Chemistry I
CMS 310K CMS 322E	Team-Based Communication Communication Ethics	CH 320N	Organic Chemistry II
EDP 350E		Biology:	to the devict small shares to an
	Introduction to Life Span Development	BIO 206L	Introductory Laboratory Experiments in Biology
HDF 304	Family Relationships	BIO 311C	Introductory Biology I
HDF 313	Child Development	BIO 311D	Introductory Biology II
HDF 335	Adult Development	Physics:	
HDF 342	Development of Psychopathology from Infancy through Adolescence	PHY 301	Mechanics
HDF 343	Human Development in Minority	PHY 101L	Laboratory for Physics 301
	and Immigrant Families	РНҮ 302К	General Physics Technical Course: Mechanics, Heat, and Sound
HDF 351	Infant Development and Attachment Relationships	PHY 302L	General Physics Technical Course: Electricity and Magnetism, Light,
HDF 378K	Advanced Child and Family Development (Approved topics)	PHY 102M	Atomic and Nuclear Physics Laboratory for Physics 302K
N 310	Communication in Health Care	PHY 102N	Laboratory for Physics 302L
	Settings	PHY 303K	Engineering Physics I
PSY 301	Introduction to Psychology	PHY 303L	Engineering Physics II
PSY 308	Biopsychology	PHY 103M	Laboratory for Physics 303K
PSY 332C	Hormones and Behavior	PHY 103N	Laboratory for Physics 303L
PSY 333D	Introduction to Developmental	PHY 316	Electricity and Magnetism
PSY 341K	Psychology Selected Topics in Psychology	PHY 116L	Laboratory for Physics 316
FUI J4IN	(Topic 4: Health Psychology)	PHY 317K	General Physics I
SOC 302	Introduction to the Study of Society	PHY 317L	General Physics II
SOC 330C	Death and Dying: Sociological	PHY 117M	Laboratory for Physics 317K
	Perspectives	PHY 117N	Laboratory for Physics 317L

Statistics:

SDS 301	Elementary Statistical Methods
SDS 302	Data Analysis for the Health Sciences
SDS 304	Statistics in Health Care
SDS 306	Statistics in Market Analysis
SDS 328M	Biostatistics

Additional upper-division coursework in biochemistry, biology, and chemistry by approval of the undergraduate certificate adviser

### Non-science Major Track

### Requirements Hours

18

Complete 18 hours chosen from one of the health professions preparation sequences. The 18 hours may be composed of introductory coursework, advanced coursework, or a mixture of the two

#### Pre-dental Preparation

Fie-dental Fieparation	
Introductory Coursework	c.
BIO 206L	Introductory Laboratory Experiments in Biology
BIO 311C	Introductory Biology I
BIO 311D	Introductory Biology II
CH 204	Introduction to Chemical Practice
PHY 302K	General Physics Technical Course: Mechanics, Heat, and Sound
PHY 302L	General Physics Technical Course: Electricity and Magnetism, Light, Atomic and Nuclear Physics
PHY 102M	Laboratory for Physics 302K
PHY 102N	Laboratory for Physics 302L <sup>1</sup>
Advanced Coursework:	
BCH 369	Fundamentals of Biochemistry
BIO 320	Cell Biology
BIO 325	Genetics
BIO 326R	General Microbiology <sup>2</sup>
CH 220C	Organic Chemistry Laboratory
CH 320M	Organic Chemistry I
CH 320N	Organic Chemistry II
Pre-medical Preparation	
Introductory Coursework	
BIO 206L	Introductory Laboratory Experiments in Biology
BIO 311C	Introductory Biology I
BIO 311D	Introductory Biology II
CH 204	Introduction to Chemical Practice
PHY 302K	General Physics Technical Course: Mechanics, Heat, and Sound
PHY 302L	General Physics Technical Course: Electricity and Magnetism, Light, Atomic and Nuclear Physics
PHY 102M	Laboratory for Physics 302K
PHY 102N	Laboratory for Physics 302L <sup>1</sup>
Advanced Coursework:	
BCH 369	Fundamentals of Biochemistry
BIO 320	Cell Biology
BIO 325	Genetics

BIO 326R	General Microbiology <sup>2</sup>
CH 220C	Organic Chemistry Laboratory
CH 320M	Organic Chemistry I
CH 320N	Organic Chemistry II
Pre-occupational Therap	by Preparation
Introductory Coursework	κ.
BIO 311C	Introductory Biology I
BIO 311D	Introductory Biology II
BIO 206L	Introductory Laboratory Experiments in Biology
CH 204	Introduction to Chemical Practice
SDS 302	Data Analysis for the Health Sciences
PHY 302K	General Physics Technical Course: Mechanics, Heat, and Sound
PHY 102M	Laboratory for Physics 302K
Advanced Coursework:	
BIO 325	Genetics
BIO 446L	Human Microscopic and Gross Anatomy
BIO 365S	Human Systems Physiology
BIO 165U	Human Systems Physiology Laboratory
Pre-optometry Preparat	ion
Introductory Coursework	<:
BIO 311C	Introductory Biology I
BIO 311D	Introductory Biology II
BIO 206L	Introductory Laboratory Experiments in Biology
CH 204	Introduction to Chemical Practice
SDS 302	Data Analysis for the Health Sciences
PHY 302K	General Physics Technical Course: Mechanics, Heat, and Sound
PHY 102M	Laboratory for Physics 302K
PHY 302L	General Physics Technical Course: Electricity and Magnetism, Light, Atomic and Nuclear Physics
PHY 102N	Laboratory for Physics 302L <sup>1</sup>
Advanced Coursework:	
BCH 369	Fundamentals of Biochemistry
BIO 325	Genetics
BIO 326R	General Microbiology <sup>2</sup>
BIO 226L	General Microbiology Laboratory
BIO 446L	Human Microscopic and Gross Anatomy
BIO 365S	Human Systems Physiology
BIO 165U	Human Systems Physiology Laboratory
CH 320M	Organic Chemistry I
CH 320N	Organic Chemistry II
CH 220C	Organic Chemistry Laboratory
Pre-physical Therapy Pr	eparation
Introductory Coursework	<:
BIO 311C	Introductory Biology I
BIO 311D	Introductory Biology II

BIO 206L	Introductory Laboratory	BIO 325	Genetics
<u> </u>	Experiments in Biology	BIO 226L	General Microbiology Laboratory
CH 204	Introduction to Chemical Practice	BIO 326R	General Microbiology <sup>2</sup>
SDS 302	Data Analysis for the Health Sciences	BIO 446L	Human Microscopic and Gross Anatomy
PHY 302K	General Physics Technical Course:	BIO 365S	Human Systems Physiology
PHY 102M	Mechanics, Heat, and Sound Laboratory for Physics 302K	BIO 165U	Human Systems Physiology Laboratory
PHY 302L	General Physics Technical Course:	CH 320M	Organic Chemistry I
	Electricity and Magnetism, Light,	CH 320N	Organic Chemistry II
	Atomic and Nuclear Physics	CH 220C	Organic Chemistry Laboratory
PHY 102N	Laboratory for Physics 302L <sup>1</sup>	Pre-veterinary Prepar	ation
dvanced Coursework		Introductory Coursew	vork:
BIO 325	Genetics	BIO 311C	Introductory Biology I
BIO 446L	Human Microscopic and Gross	BIO 311D	Introductory Biology II
	Anatomy	BIO 206L	Introductory Laboratory
BIO 365S	Human Systems Physiology		Experiments in Biology
BIO 165U	Human Systems Physiology	CH 204	Introduction to Chemical Practice
na nhuaisian Assista	Laboratory	PHY 302K	General Physics Technical Course
re-physician Assista			Mechanics, Heat, and Sound
ntroductory Coursewo		PHY 102M	Laboratory for Physics 302K
BIO 311C	Introductory Biology I	PHY 302L	General Physics Technical Course
BIO 311D	Introductory Biology II		Electricity and Magnetism, Light,
BIO 206L	Introductory Laboratory Experiments in Biology		Atomic and Nuclear Physics
CH 204	Introduction to Chemical Practice	PHY 102N	Laboratory for Physics 302L <sup>1</sup>
		Advanced Coursewor	
SDS 302	Data Analysis for the Health Sciences	BCH 369	Fundamentals of Biochemistry
NTR 306	Fundamentals of Nutrition	BIO 325	Genetics
dvanced Coursework		BIO 326R	General Microbiology
BCH 369	Fundamentals of Biochemistry	BIO 226L	General Microbiology Laboratory
BIO 320	Cell Biology	BIO 344	Molecular Biology
BIO 325	Genetics	CH 320M	Organic Chemistry I
BIO 226L	General Microbiology Laboratory	CH 320N	Organic Chemistry II
BIO 326R	General Microbiology <sup>2</sup>	CH 220C	Organic Chemistry Laboratory
BIO 344	Molecular Biology	SDS 321	Introduction to Probability and
BIO 446L	Human Microscopic and Gross		Statistics
DIO 440L	Anatomy	or SDS 328M	Biostatistics
BIO 365S	Human Systems Physiology		
BIO 165U	Human Systems Physiology		us-based physics sequence may
	Laboratory		pose of earning the certificate.
CH 320M	Organic Chemistry I	2. Previously complet	ed Biology 326M may substitute.
011 00011	Organic Chemistry II	Scientific Con	nputation and Data Scie
CH 320N			
CH 320N CH 220C	Organic Chemistry Laboratory		inputation and Data Colo
CH 220C	Organic Chemistry Laboratory	Certificate	
CH 220C Pre-pharmacy Prepara	Organic Chemistry Laboratory tion:	Certificate The Certificate in Scie	- ntific Computation and Data Sciences
CH 220C Pre-pharmacy Prepara	Organic Chemistry Laboratory <b>tion:</b> ork:	The Certificate in Scie undergraduates equip	ntific Computation and Data Sciences themselves with the mathematical, st
CH 220C Pre-pharmacy Prepara ntroductory Coursewo	Organic Chemistry Laboratory <b>tion:</b> ork: Introductory Biology I	Certificate The Certificate in Scie undergraduates equip computer-based tools	ntific Computation and Data Sciences themselves with the mathematical, st necessary to investigate complex sys
CH 220C Pre-pharmacy Prepara ntroductory Coursewo BIO 311C	Organic Chemistry Laboratory tion: ork: Introductory Biology I Introductory Biology II Introductory Laboratory	Certificate The Certificate in Scie undergraduates equip computer-based tools variety of applications University in science,	ntific Computation and Data Sciences themselves with the mathematical, st necessary to investigate complex sys s. It is designed to appeal to students a engineering, economics, premedicine,
CH 220C Pre-pharmacy Prepara ntroductory Coursewo BIO 311C BIO 311D BIO 206L	Organic Chemistry Laboratory tion: ork: Introductory Biology I Introductory Biology II Introductory Laboratory Experiments in Biology	Certificate The Certificate in Scie undergraduates equip computer-based tools variety of applications University in science, and many other discip	ntific Computation and Data Sciences themselves with the mathematical, st necessary to investigate complex sys s. It is designed to appeal to students a engineering, economics, premedicine, lines. The program is administered by
CH 220C Pre-pharmacy Prepara ntroductory Coursewo BIO 311C BIO 311D	Organic Chemistry Laboratory tion: ork: Introductory Biology I Introductory Biology II Introductory Laboratory Experiments in Biology Introduction to Chemical Practice Data Analysis for the Health	Certificate The Certificate in Scie undergraduates equip computer-based tools variety of applications University in science, and many other discip Department of Statist must be in good stand and must have earned	ntific Computation and Data Sciences themselves with the mathematical, st necessary to investigate complex sys s. It is designed to appeal to students a engineering, economics, premedicine, plines. The program is administered by ics and Data Sciences. To be admitted ding in an approved undergraduate deg a grade of at least <i>C</i> - in each certifica
CH 220C Pre-pharmacy Prepara ntroductory Coursewo BIO 311C BIO 311D BIO 206L CH 204	Organic Chemistry Laboratoryattion:ork:Introductory Biology IIntroductory Biology IIIntroductory LaboratoryExperiments in BiologyIntroduction to Chemical PracticeData Analysis for the HealthSciencesGeneral Physics Technical Course:	Certificate The Certificate in Scie undergraduates equip computer-based tools variety of applications University in science, and many other discip Department of Statist must be in good stand and must have earned or she has completed at any point in their ur	ntific Computation and Data Sciences themselves with the mathematical, st necessary to investigate complex sys s. It is designed to appeal to students a engineering, economics, premedicine, blines. The program is administered by ics and Data Sciences. To be admitted ding in an approved undergraduate deg d a grade of at least <i>C</i> - in each certifica . Students may apply for admission to indergraduate study; they are encourag
CH 220C Pre-pharmacy Prepara Introductory Coursewor BIO 311C BIO 311D BIO 206L CH 204 SDS 302	Organic Chemistry Laboratory         attion:         ork:         Introductory Biology I         Introductory Biology II         Introductory Laboratory         Experiments in Biology         Introduction to Chemical Practice         Data Analysis for the Health         Sciences	Certificate The Certificate in Scie undergraduates equip computer-based tools variety of applications University in science, and many other discip Department of Statist must be in good stand and must have earned or she has completed at any point in their ur	ntific Computation and Data Sciences themselves with the mathematical, st necessary to investigate complex sys s. It is designed to appeal to students a engineering, economics, premedicine, blines. The program is administered by ics and Data Sciences. To be admitted ding in an approved undergraduate deg a grade of at least <i>C</i> - in each certifica . Students may apply for admission to

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m 1}$ undamentals of Biochemistry enetics eneral Microbiology eneral Microbiology Laboratory Iolecular Biology rganic Chemistry I rganic Chemistry II rganic Chemistry Laboratory troduction to Probability and tatistics iostatistics sed physics sequence may of earning the certificate. ology 326M may substitute. tation and Data Sciences Computation and Data Sciences helps selves with the mathematical, statistical, and ssary to investigate complex systems in a designed to appeal to students across the eering, economics, premedicine, sociology, The program is administered by the d Data Sciences. To be admitted, a student an approved undergraduate degree program ade of at least C- in each certificate course he ents may apply for admission to the program aduate study; they are encouraged to apply they can be advised throughout the program.

The following coursework is required. Students must also complete Mathematics 408D or 408M as a prerequisite. No single course or topic may be used to meet more than one of these requirements.

Demuinemente		Harma	
Requirements		Hours	~
SDS 222	Introduction to Scientific Programming		2
One course in linear alge differential equations ch	bra, discrete mathematics, or osen from the following:		3
M 340L	Matrices and Matrix Calculations		
M 341	Linear Algebra and Matrix Theory		
M 362M	Introduction to Stochastic		
	Processes		
M 372K	Partial Differential Equations and Applications		
SDS 329C	Practical Linear Algebra I		
Two courses in scientific following areas:	computing, chosen from two of the		6
Numerical Methods			
CHE 348	Numerical Methods in Chemical		
	Engineering and Problem Solving		
C S 323E	Elements of Scientific Computing		
C S 323H	Elements of Scientific Computing: Honors		
C S 367	Numerical Methods		
M 348	Scientific Computation in		
	Numerical Analysis		
PGE 310	Formulation and Solution of		
	Geosystems Engineering Problems		
SDS 335	Scientific and Technical Computing		
Statistical Methods			
BME 335	Engineering Probability and Statistics		
E E 351K	Probability and Random Processes		
M 358K	Applied Statistics		
M 378K	Introduction to Mathematical Statistics		
Other Computing Topics	Statistics		
C S 324E	Elements of Graphics and		
C 3 324E	Visualization		
C S 327E	Elements of Databases		
C S 329E	Advanced Topics in Elements of Computing (Approved topics)		
C S 377	Principles and Applications of Parallel Programming		
M 346	Applied Linear Algebra		
M 362M	Introduction to Stochastic Processes		
M 368K	Numerical Methods for Applications		
M 372K	Partial Differential Equations and		
M 375T	Applications Topics in Mathematics (Approved		
M 376C	topics) Methods of Applied Mathematics		
M E 367S	Simulation Modeling		
SDS 329D	Practical Linear Algebra II		
SDS 374C	Parallel Computing for Science and		
	Engineering		

SDS 37	4D	Distributed and Grid Computing for Science and Engineering	
SDS 37	4E	Visualization and Data Analysis for Science and Engineering	
One of the science:	following cour	rses in applied computational	3
ASE 34	7	Introduction to Computational Fluid Dynamics	
BIO 321	G	Principles of Computational Biology	
BME 34	12	Biomechanics of Human Movement	
BME 34	16	Computational Biomolecular Engineering	
BME 37	'7T	Topics in Biomedical Engineering (Approved topics)	
CH 368		Advanced Topics in Chemistry (Approved topics)	
C S 324	ŀΕ	Elements of Graphics and Visualization	
C S 329	θE	Advanced Topics in Elements of Computing (Approved topics)	
ECO 36	3C	Computational Economics	
E E 379	K	Topics in Electrical Engineering (Approved topics)	
GEO 32	5K	Computational Methods	
M 375T		Topics in Mathematics (Approved topics)	
M 374N	Λ	Mathematical Modeling in Science and Engineering	
PHY 32	9	Introduction to Computational Physics	
An indepe	ndent research	course:	4
SDS 47	9R	Undergraduate Research	

# Textile Conservation and Museum Studies Certificate

The Certificate in Textile Conservation and Museum Studies helps undergraduates equip themselves with the fiber science, exhibition planning, textile conservation, and museum management skills necessary to conserve textiles in various settings. It is designed to appeal to students across the University in science, history, information science, computational science, merchandising, fiber science and apparel design, and many other disciplines. The program is administered by the Division of Textiles and Apparel in the School of Human Ecology. To be admitted, a student must be in good standing in an approved undergraduate degree program and must have earned a grade of at least *C*- in each certificate course he or she has completed. Students may apply for admission to the program at any point in their undergraduate study; they are encouraged to apply as early as possible so that they can be advised throughout the program.

The following coursework is required:

Requirements		Hours	
INF 304D	Introduction to Information Studies		3
INF 335C	Information in Cyberspace		3
TXA 205 & TXA 105L	Textiles and Textiles Laboratory		3
TXA 219C & TXA 119L	Applied Art in Visual Presentation and Applied Art in Visual Presentation Laboratory		3

TXA 325L	History of Dress and Cultural Change I	3
TXA 325M	History of Dress and Cultural Change II	3
TXA 352C	Field Experience in Textile Conservation	3
TXA 355D	Textiles Artifact Management and Conservation	3

### UTeach Natural Sciences Secondary Teaching Option Certificate

The UTeach Natural Sciences program offers a secondary teaching option certificate to students who intend to teach at the middle or high school level.

The following coursework is required, with grades of at least C-:

Requirements	Но	ours
One of the following cou	rses:	3
BIO 337	Selected Topics in Biology (Topic 2: Research Methods: UTeach)	
CH 368	Advanced Topics in Chemistry (Topic 1: Research Methods: UTeach)	
PHY 341	Selected Topics in Physics (Topic 7: Research Methods: UTeach)	
HIS 329U	Perspectives on Science and Mathematics	3
or PHL 329U	Perspectives on Science and Mathema	tics
Eighteen hours of profes consisting of the followi	sional development coursework ng:	18
EDC 651S	Secondary School Teaching Practicum	
EDC 365C	Knowing and Learning in Math and Science	
or UTS 350	Knowing and Learning in Math and Sci	ence
EDC 365D	Classroom Interactions	
or UTS 355	Classroom Interactions	
EDC 365E	Project-Based Instruction	
or UTS 360	Project-Based Instruction	
UTS 101 & UTS 110	Secondary Teacher Education Preparation: Step 1	
& UTS 170	and Secondary Teacher Education Preparation: STEP 2 and Student Teaching Seminar	

In addition, students must meet the following requirements to graduate and be recommended for certification:

- 1. University grade point average of at least 2.50
- 2. Successful completion of secondary teacher certification and identified discipline specific content courses
- 3. Successful passing of final teaching portfolio review, conducted by the UTeach Program in Natural Sciences

#### **Special Requirements**

Students who successfully complete this certificate may be eligible for recommendation for state teaching certification if they have met all professional development and discipline specific content courses. Students seeking middle grades certification must also complete the following courses with grades of at least *C*-: Educational Psychology 350G or Psychology 301 and 304; and Curriculum and Instruction 339E.

State of Texas teacher certification requirements are governed by the Texas Education Agency and are subject to change. Students must adhere to current teacher certification requirements, even if they differ from those listed in the University catalogs.

For more information about these requirements, students should consult with the UTeach-Natural Sciences academic adviser.

### Courses

The faculty has approval to offer the following courses in the academic years 2018-2019 and 2019-2020; however, not all courses are taught each semester or summer session. Students should consult the *Course Schedule* (http://registrar.utexas.edu/schedules) to determine which courses and topics will be offered during a particular semester or summer session. The *Course Schedule* may also reflect changes made to the course inventory after the publication of this catalog.

A full explanation of course numbers is given in the *General Information Catalog.* In brief, the first digit of a course number indicates the semester hour value of the course. The second and third digits indicate the rank of the course: if they are 01 through 19, the course is of lower-division rank; if 20 through 79, of upper-division rank; if 80 through 99, of graduate rank.

### **Natural Sciences**

### Natural Sciences: NSC

#### Lower-Division Courses

#### NSC 301C. Freshman Seminar.

Restricted to first-semester freshmen. Small-group seminar involving reading, discussion, writing, and oral reports. Introduction to University resources, including libraries, computer and research facilities, and museums. Several sections are offered each semester, with various topics and instructors. Two lecture hours and one discussion hour a week for one semester.

#### NSC 001D. Practicum in Medical Laboratory Science.

Restricted to medical laboratory science majors; contact the department for permission to register for this class. Students participate in a twelveto sixteen-month off-campus education program. Forty laboratory hours a week for one semester. Offered on the pass/fail basis only. Prerequisite: Completion of all organized coursework for the Bachelor of Science in Medical Laboratory Science degree and consent of the program director.

#### NSC 001S. Natural Sciences Seminar.

Restricted to students in special programs in the College of Natural Sciences. Seminars may include study sessions, career and networking events, student and community speakers, and other subjects related to issues for students in science. Emphasis on student participation. May be repeated for credit.

## NSC 302. Texas Interdisciplinary Plan: Critical Thinking Seminar.

Restricted to students in the Texas Interdisciplinary Plan or in the Gateway Program. An examination of fundamental concepts in critical thinking, including the role of intellectual virtues, an analysis of the elements of thought, Socratic thinking, and the application of universal intellectual standards. Three lecture hours a week for one semester, with

additional hours to be arranged. Liberal Arts 302 and Natural Sciences 302 may not both be counted. May not be repeated for credit.

#### NSC 303. Creative Communication of Scientific Research.

Same as Communication 308. Learn to communicate about science, technology, and medicine to broad audiences in order to increase understanding of the impact these fields have on human lives. Three lecture hours a week for one semester. Communication 308 and Natural Sciences 303 may not both be counted.

#### NSC 306J. Hands-On Science I.

Restricted to applied learning and development majors. The first of an integrated sequence of laboratory-based courses. Subjects include energy and motion, electrical circuits, atomic theory, waves, and sound. Two lecture hours and three laboratory hours a week for one semester. Natural Sciences 306J and 309 (Topic: Science for the Twenty-First Century I) may not both be counted. May not be counted toward a degree in the College of Natural Sciences.

#### NSC 306K. Hands-On Science II.

Restricted to applied learning and development majors. The second of an integrated sequence of laboratory-based courses. Subjects include physical and chemical properties of matter, Earth's building blocks, plate tectonics, landforms, and weathering. Two lecture hours and three laboratory hours a week for one semester. Natural Sciences 306K and 309 (Topic: Science for the Twenty-First Century II) may not both be counted. May not be counted toward a degree in the College of Natural Sciences. Prerequisite: Natural Sciences 306J with a grade of at least C-.

#### NSC 306L. Hands-On Science III.

Restricted to applied learning and development majors. The third of an integrated sequence of laboratory-based courses. Subjects include properties of life, compartments of living organisms, inheritance, adaptations, variations, and disease. Two lecture hours and three laboratory hours a week for one semester. Natural Sciences 306L and 309 (Topic: Science for the Twenty-First Century III) may not both be counted. May not be counted toward a degree in the College of Natural Sciences. Prerequisite: Natural Sciences 306J and 306K with a grade of at least C- in each.

#### NSC 306M. Hands-On Science IV.

The fourth of an integrated sequence of laboratory-based courses. Subjects include astronomy and the earth's climate. Two lecture hours and three laboratory hours a week for one semester. Natural Sciences 306M and 309 (Topic: Science for the Twenty-First Century IV) may not both be counted. May not be counted toward a degree in the College of Natural Sciences. Prerequisite: Natural Sciences 306J and 306K with a grade of at least C- in each.

## NSC 108, 208, 308, 408, 508, 608, 708, 808, 908. Topics in Natural Sciences.

Restrictions vary with the topic. For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit when the topics vary. Offered on the pass/fail basis only. Prerequisite: Varies with the topic.

**Topic 1: Capstone Prospectus Seminar.** Restricted to students enrolled in the Evidence and Inquiry Certificate program or in the Health Science Honors Program. Seminar to prepare students for their capstone project by helping them develop a research prospectus, identify faculty mentors, and develop a target list of journals for publication of a report on their research. For each semester hour of credit earned, one lecture hour a week for one semester. Offered on the pass/fail basis only. **Topic 2: Evidence and Inquiry Proposal Seminar.** Enrollment restricted to the Evidence and Inquiry Certificate program. Development of compelling, cross-disciplinary, and academically feasible questions of interest outside student's major area of study; design a field of study around those questions; and write a field proposal for faculty review. For each semester hour of credit earned, one lecture hour a week for one semester. Offered on the pass/fail basis only.

#### NSC 109, 209, 309. Topics in Natural Science.

Restrictions vary with the topic. For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

#### Topic 3: Natural Sciences Ethics Seminar.

**Topic 4: Polymathic Capstone Field Invention.** Restricted to students pursuing the Evidence and Inquiry Certificate. Guidance in developing a feasible interdisciplinary field of study and consulting with faculty who are familiar with the field. Substantive writing instruction to develop a proposal that describes and justifies the interdisciplinary field of study.

**Topic 5: Introduction to Applied Problem Solving.** Restricted to firstyear students in the TIP Scholars program. Introduction to applied problem-solving with a focus on critical thinking and ethical reasoning on issues relevant to college students.

#### NSC 209P. Topics in Calculus for Emerging Scholars.

Restricted to students in the Texas Interdisciplinary Plan Scholars Program. A workshop focusing on ideas more than computation and procedures, where students work in small groups on sets of problems designed to encourage advanced thinking about calculus. Three lecture hours a week for one semester. Mathematics 210T (Topic: Topics for Emerging Scholars) and Natural Sciences 209P may not both be counted. May be repeated for credit. Offered on the pass/fail basis only. Prerequisite: Concurrent enrollment in an approved calculus course.

#### NSC 110E. Internship in the Sciences.

Restricted to students in the College of Natural Sciences. Practical work experience related to the student's area of interest in natural sciences. Internships may be on or off campus, paid or unpaid, and may include work with nonprofit agencies, government offices, or private corporations. Students work in a professional environment and apply analysis, communication, and other academic skills to practical work. Individual instruction conducted on the Web. May be repeated for credit. Offered on the pass/fail basis only. Prerequisite: Completion of fifteen semester hours of coursework and consent of instructor.

#### NSC 110H. Topics in Natural Sciences Honors Seminar.

Restricted to students in honors programs in the College of Natural Sciences. Emphasis on student participation. Format may include student speakers, outside speakers, discussions, visits to laboratories, or other enrichment activities. The equivalent of one lecture hour a week for one semester. May be repeated for credit when the topics vary. Offered on the pass/fail basis only.

Topic 1: Dean's Scholars First-Year Seminar. Restricted to students in the Dean's Scholars Program. The equivalent of one lecture hour a week for one semester. Offered on the pass/fail basis only. Topic 2: Health Science Scholars First-Year Seminar. Restricted to students in the Health Science Scholars Program. The equivalent of one lecture hour a week for one semester. Offered on the pass/fail basis only.

**Topic 3: Polymathic Scholars First-Year Seminar.** Restricted to students in the Polymathic Scholars Program. The equivalent of one lecture hour a week for one semester. Offered on the pass/fail basis only.

#### NSC 311. Critical Reasoning.

Restricted to students in the Texas Interdisciplinary Plan program. An examination of the fundamental concepts in critical reasoning, including the analysis of argument, application of intellectual standards, and the role of intellectual virtues. Three lecture hours a week for one semester, with additional hours to be arranged.

#### NSC 115. Women in Natural Sciences Seminar.

The work and lives of women scientists in a sociocultural context. One lecture hour a week for one semester.

#### NSC 118C, 218C, 318C. Forum Seminar Series.

Restricted to freshmen and sophomores. Lectures and discussions on various contemporary issues. Emphasis on multidisciplinary perspectives and critical discourse. For 118C, two lecture hours a week for eight weeks; for 218C, two lecture hours a week for one semester; for 318C, three lecture hours a week for one semester, or two lecture hours and one hour of supervised research a week for one semester. May be repeated for credit when the topics vary.

## NSC 119, 219, 319, 419, 519, 619. International Learning Seminars.

Restricted to students participating in a Maymester Abroad course. Discussion of various issues related tot he academic, cultural, and personal aspects of completing academic work in international locations. For each semester hour of credit earned, one lecture hour a week for one semester. Natural Sciences 119, 219, 319, 419, 519, 619 and Undergraduate Studies 119 may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: Varies with the topic.

### **Upper-Division Courses**

#### NSC 120E. Internship in the Sciences.

Restricted to students in the College of Natural Sciences. Practical work experience related to the student's area of interest in Natural Sciences. Internships may be on or off campus, paid or unpaid, and may include work with nonprofit agencies, government offices, or private corporations. Students work in a professional environment and apply analysis, communication, and other academic skills to practical work. Individual instruction conducted on the Web. May be repeated for credit. Offered on the pass/fail basis only. Prerequisite: Upper-division standing and consent of instructor.

#### NSC 321. Introduction to Peer Mentoring and Leadership.

Restricted to students in the College of Natural Sciences. Explores current theory and research related to peer mentoring and leadership within higher education. Includes interactive lectures; and the opportunity for students to identify and work through ethical choices as peer leaders; to study leadership concepts such as conflict resolution, diversity, and group dynamics; to work collaboratively; and to conduct independent research. Three lecture hours a week for one semester. May be repeated for credit. Prerequisite: Consent of instructor.

## NSC 122, 222, 322, 422, 522, 622, 722, 822, 922. Natural Science Topics.

Restrictions vary with the topic. For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit when the topics vary. Offered on the pass/fail basis only. Prerequisite: Upper-division standing; additional prerequisites vary with the topic.

## NSC 123, 223, 323, 423, 523, 623, 723, 823, 923. Natural Sciences Topics.

Restrictions vary with the topic. For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit

when the topics vary. Prerequisite: Upper-division standing; additional prerequisites vary with the topic.

**Topic 1: Polymathic Capstone Thesis Preparation Seminar.** Restricted to students pursuing the Evidence and Inquiry Certificate. Supports the research process to identify a faculty mentor, define appropriate thesis topics, develop an annotated bibliography, draft a thesis proposal, and develop an initial plan for drafting thesis. Additional prerequisite: Natural Sciences 109 (Topic 4).

## NSC 124, 224, 324, 424, 524, 624, 724, 824, 924. Natural Sciences Topics.

Restrictions vary with the topic. For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: Upper-division standing.

## NSC 129, 229, 329, 429, 529, 629. International Learning Seminars.

Restricted to students participating in a Maymester Abroad course. Discussion of various issues related tot he academic, cultural, and personal aspects of completing academic work in international locations. For each semester hour of credit earned, one lecture hour a week for one semester. Natural Sciences 129, 229, 329, 429, 529, 629 and Undergraduate Studies 119 may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: Varies with the topic.

#### NSC 371. Capstone Thesis Seminar.

Restricted course; contact the College of Natural Sciences Honors Center for permission to register. Directed reading, research, and discussion followed by the writing of a substantial thesis. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

### **Department of Astronomy**

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

### Astronomy: AST

#### **Lower-Division Courses**

#### AST 301 (TCCN: ASTR 1303). Introduction to Astronomy.

General introduction to astronomy for nonscience majors. The solar system, stars, galaxies, and cosmology. Three lecture hours a week for one semester. Only one of the following may be counted: Astronomy 301, 302, 303, 307. May not be counted toward a degree in the College of Natural Sciences.

#### AST 101L. Astronomy Discovery Laboratory.

For nonscience majors. Hands-on projects in observational astronomy and related laboratory disciplines. Students work in small groups. Three laboratory hours a week for one semester. May not be counted by students with credit for Astronomy 103L. Prerequisite: Credit or registration for Astronomy 301.

#### AST 302. Self-Paced Introduction to Astronomy.

General, self-paced introduction to astronomy for nonscience majors. The solar system, stars, galaxies, and cosmology. Self-paced. Only one of the following may be counted: Astronomy 301, 302, 303, 307. May not be counted toward a degree in the College of Natural Sciences.

## AST 303. Introduction to Astronomy with Celestial Observations.

General introduction to astronomy for nonscience majors. The solar system, stars, galaxies, and cosmology. Introduces students to the night sky and includes some observational activities. Three lecture hours a week for one semester. Only one of the following may be counted: Astronomy 301, 302, 303, 307. May not be counted toward a degree in the College of Natural Sciences.

#### AST 103L (TCCN: ASTR 1103). Astronomical Observations.

For nonscience majors. Observations of the night sky with the naked eye and small telescopes; indoor laboratory activities. Two laboratory hours a week for one semester. May not be counted by students with credit for Astronomy 101L, 302, or 303. Prerequisite: Credit or registration for Astronomy 301 or 307.

#### AST 104. Undergraduate Astronomy Seminar.

Designed for astronomy majors. Discussions about current astronomical research, with different topics emphasized each semester. One lecture hour a week for one semester. May be repeated twice for credit when the topics vary. Offered on the pass/fail basis only.

#### AST 307. Introductory Astronomy.

Introduction to astronomy for science and engineering students. The solar system, stars, galaxies, and cosmology. Three lecture hours a week for one semester. Only one of the following may be counted: Astronomy 301, 302, 303, 307. Prerequisite: Mathematics 305G or the equivalent or consent of instructor; high school trigonometry and physics are recommended.

## AST 309 (TCCN: ASTR 1304). Topics in Astronomy for Nonscience Students.

Selected topics in modern astronomy: solar system, galaxies, peculiar stars, cosmology, and others. Three lecture hours a week for one semester. May not be counted toward a degree in the College of Natural Sciences. May be repeated for credit when the topics vary. Prerequisite: Astronomy 301, 302, or 303.

**Topic 1: Popular Astronomy.** Survey of topics of greatest interest to the public and the media, including new planets, black holes, dark matter, dark energy, and the origin of the Universe.

#### AST 309C. Birth of Stars and Planets.

Study of how stars and planets form, including discussions on the implications for the formation of our own solar system. Designed for non-College of Natural Sciences majors. Three lecture hours a week for one semester. Astronomy 309 (Topic: Birth of Stars and Planets) and 309C may not both be counted. May not be counted toward a degree in the College of Natural Sciences. Prerequisite: Astronomy 301 or 307.

#### AST 309G. Popular Astronomy for Nonscience Students.

Subjects include new planets, neutron stars, supernovae, gammaray bursts, black holes, dark matter, dark energy, and the origin of the universe. Designed for non-College of Natural Sciences majors. Three lecture hours a week for one semester. Astronomy 309 (Topic 1: Popular Astronomy) and 309G may not both be counted. May not be counted toward a degree in the College of Natural Sciences. Prerequisite: Astronomy 301 or 307.

#### AST 309L. Search for Extraterrestrial Life.

Origin of life in the solar system, existence of other planetary systems, possibilities and techniques for detection of and communication with other intelligences. Designed for non-College of Natural Sciences majors. Three lecture hours a week for one semester. May not be counted toward

a degree in the College of Natural Sciences. Prerequisite: Astronomy 301 or 307.

#### AST 309N. Lives and Deaths of Stars.

How stars live and die; extremes of stars and their life cycles. Exotic objects such as white dwarfs, supernovae, neutron stars, pulsars, and black holes. Specific subjects may vary with instructor. Designed for non-College of Natural Sciences majors. Three lecture hours a week for one semester. May not be counted toward a degree in the College of Natural Sciences. Prerequisite: Astronomy 301 or 307.

#### AST 309P. Astronomy in Science Fiction.

The use of astronomy and other sciences in science fiction literature. Critical analysis of selected novels as to the validity of the astronomy used. Designed for non-College of Natural Sciences majors. Three lecture hours a week for one semester. Prerequisite: Astronomy 301, 302, or 303.

#### AST 309Q. Time and the Cosmos.

From the beginning of time in the Big Bang to the end of time in the black hole. Includes the early universe, the formation and evolution of single and double stars, and the supercompact objects they eventually become: white dwarfs, pulsars, and black holes. Designed for non-College of Natural Sciences majors. Three lecture hours a week for one semester. May not be counted toward a degree in the College of Natural Sciences. Prerequisite: Astronomy 301 or 307.

#### AST 309R. Galaxies, Quasars, and the Universe.

Galaxies, quasars, giant black holes; cosmic evolution; the origin and future of the universe. Designed for non-College of Natural Sciences majors. Three lecture hours a week for one semester. May not be counted toward a degree in the College of Natural Sciences. Prerequisite: Astronomy 301 or 307.

#### AST 309S. The Solar System.

The nature, origin, and evolution of our solar system, including planets, moons, and other bodies. Designed for non-College of Natural Sciences majors. Three lecture hours a week for one semester. May not be counted toward a degree in the College of Natural Sciences. Prerequisite: Astronomy 301 or 307.

#### AST 309T. The Milky Way Galaxy.

Our spiral system of stars, gas, and dust; star formation. Designed for non-College of Natural Sciences majors. Three lecture hours a week for one semester. Prerequisite: Astronomy 301 or 307.

#### AST 110C, 210C, 310C. Conference Course in Astronomy.

Restricted enrollment; contact the department for permission to register. Independent research course with supervision by astronomy faculty member or research scientist. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester; hours to be arranged. May be repeated for credit.

#### AST 110K, 210K, 310K. Topics in Astronomy Research.

Designed for science and engineering majors. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester; hours to be arranged. May be repeated for credit when the topics vary. Prerequisite: Consent of instructor or adviser.

#### AST 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Astronomy.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Astronomy. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### **Upper-Division Courses**

#### AST 321. Current Problems in Astronomy.

For nonscience majors. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upperdivision standing; and Astronomy 301, 302, 303, or consent of instructor.

#### AST 324. Origins: The Universe, Stars, Planets, and Life.

For nonscience majors. Cosmic origins from the Big Bang to life, and the connections among the origins of stars, planets, and life. Three lecture hours a week for one semester. Prerequisite: Upper-division standing; and Astronomy 301, 302, 303, or consent of instructor.

## AST 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Astronomy.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Astronomy. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### AST 350L. History and Philosophy of Astronomy.

Historical influence of astronomical concepts on social, economic, literary, and scientific life; the place of astronomy in society. Three lecture hours a week for one semester. Prerequisite: Upper-division standing; and Astronomy 301, 302, 303, or consent of instructor.

#### AST 351. Astronomical Instrumentation.

A hands-on course in computer-controlled optical instrumentation. Intended for natural science and engineering students interested in the practical aspects of instrument design and construction. Includes optics and optical design, electronics, machining and mechanical design, and computer interfacing. Students work in groups and as teams to design a computer-controlled optical instrument. The equivalent of three lecture hours a week for one semester. Prerequisite: Upper-division standing in the College of Natural Sciences or the Cockrell School of Engineering, or consent of instructor.

#### AST 352K. Stellar Astronomy.

Properties of stars and starlight: principles of radiation; interpretation of stellar spectra. Observational techniques such as photometry, spectroscopy, and telescopes and detectors; variable stars; binary stars. Three lecture hours a week for one semester. Prerequisite: Upper-division standing, and one of the following: Physics 301 and 303L; 301 and 316; 303K and 303L; or 303K and 316.

## AST 352L. Positional, Dynamical, and Kinematical Astronomy.

Coordinate systems and time; stellar positions and motions; the kinematics and dynamics of star clusters and galaxies. Three lecture hours a week for one semester. Prerequisite: Credit or registration for Mathematics 427K.

#### AST 152M. Stellar Astronomy Laboratory.

An introduction to practical observational techniques in astronomy, designed for astronomy majors or advanced students in a physical science. Exercises on the spectroscopy, photometry, and positions of stars using a sixteen-inch telescope on campus. Three laboratory hours a week for one semester. With consent of instructor, may be repeated for credit. Prerequisite: Physics 316 and 116L; credit or registration for Astronomy 352K is recommended.

#### AST 353. Astrophysics.

Survey of the physics of stellar and nonstellar radiation laws, stellar atmospheres and interiors; high-energy astrophysics. Designed for science and engineering majors. Three lecture hours a week for one semester. Prerequisite: One of the following: Physics 301 and 303L; 301 and 316; 303K and 303L; or 303K and 316.

#### AST 358. Galaxies and the Universe.

Our galaxy and its constituents; stars and interstellar matter. Properties of other galaxies; galaxy interactions and mergers; expansion and evolution of the universe. Designed for science and engineering majors. Three lecture hours a week for one semester. Prerequisite: Upper-division standing, and one of the following: Physics 301 and 303L; 301 and 316; 303K and 303L; or 303K and 316.

#### AST 364P. Planetary Systems.

Modern studies of the solar system, including properties of the planets and smaller bodies, and the origin of planetary systems. Three lecture hours a week for one semester. Astronomy 364 and 364P may not both be counted. Prerequisite: Upper-division standing; Physics 316 or 303L; and Astronomy 307, 352K, or 353.

#### AST 367M. Physical Science: Methods of Astronomy.

Same as Physical Science 367M. An introductory, self-paced course in the methods of astronomy that emphasizes learning astronomical principles through observations. Six laboratory hours a week for one semester. May not be counted toward the Bachelor of Arts, Plan I, degree with a major in astronomy. Prerequisite: Upper-division standing and nine semester hours of coursework in mathematics and/or science, including one of the following: Physical Science 303, 304, Astronomy 301, 302, 303. Equivalent preparation in mathematics, physics, chemistry, or earth sciences may be substituted with written approval of the instructor.

#### AST 175, 275, 375. Topics in Astronomy Research.

Designed for science and engineering majors. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester; hours to be arranged. May be repeated for credit when the topics vary. Prerequisite: Consent of instructor or adviser.

#### AST 175C, 275C, 375C. Conference Course in Astronomy.

Restricted enrollment; contact the department for permission to register. Independent research course with astronomy faculty member or research scientist. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester; hours to be arranged. May be repeated for credit.

#### AST 376. Special Topics in Advanced Astronomy.

Designed for science majors. Three lecture hours a week for one semester. Up to six semester hours may be counted toward the major requirement for the Bachelor of Arts with a major in astronomy. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and consent of instructor.

**Topic 1: Observational Methods in Astronomy.** A hands-on course in astronomical observations and data analysis. Explores astronomical observing techniques, data reduction and analysis, and interpretation of results. The coursework will include regular exercises in obtaining and analyzing data to solve currently relevant astronomical problems. Additional prerequisite: Astronomy 376R with a grade of at least C-.

#### AST 376C. Cosmology.

The laws of physics applied to the Universe at large: its featureless beginning in the Big Bang, its fundamental constituents including radiation, atoms, and dark matter; the discoveries of universal expansion and dark energy, and a structure reflected in the web of galaxies. Designed for science and engineering majors. Three lecture hours a week for one semester. Astronomy 376 (Topic: Cosmology) and 376C may not both be counted. Prerequisite: Upper-division standing, and one of the following: Physics 301 and 303L; 301 and 316; 303K and 303L; or 303K and 316.

#### AST 376R. A Practical Introduction to Research Methods.

Restricted to science and engineering majors. Practical exercises including analysis of imaging data, visualization, programming exercises with Python, IDL or other languages, statistical analyses, and training for papers and oral presentations. Three lecture hours a week for one semester. Astronomy 376 (Topic: Practical Intro to Research) and 376R may not both be counted. Prerequisite: Mathematics 305G or the equivalent; prior computing experience and an introductory astronomy course are recommended.

#### AST 379H. Honors Tutorial Course.

Restricted to science majors approved to graduate with honors. Research project and thesis for students electing to take the honors program in astronomy. Conference course. May be repeated once for credit. Prerequisite: Consent of the departmental honors adviser.

### Biology

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

### **Biology: BIO**

## Lower-Division Courses

#### BIO 101C, 301C, 401C, 601C. Topics in Biology.

Topics in biology that are especially relevant to current issues and problems in modern society. For each semester hour of credit earned, one lecture hour a week for one semester. Some topics require one additional discussion hour or three or four additional laboratory hours a week. May not be counted toward a degree in biology. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: The Biology of Being Human.** Introductory biology course that covers human evolution, genetics and genomics, behavior, population growth and environmental issues. May not be counted toward a degree in the College of Natural Sciences.

#### BIO 301D. Biology for Business, Law, and Liberal Arts.

Designed for nonscience majors. The scientific method and the social uses of scientific information. Topics include diet and chronic disease, radiation biology, DNA fingerprinting, the biology of learning, conservation of biotic diversity, and the biology of reproduction. Three lecture hours a week for one semester. May not be counted toward a degree in the College of Natural Sciences.

#### BIO 301E. Problems in Modern Biology.

An introduction to major concepts in biology, with emphasis on topics, such as genetics, that are relevant to current issues in the field. Three lecture hours and one discussion hour a week for one semester. Biology 301E and 301L may not both be counted; Biology 301E and 301M may

not both be counted. May not be counted toward a degree in biology. Prerequisite: Admission to the Plan II Honors Program.

#### BIO 301G. Genetics in the 21st Century.

Designed for non-science majors. An elementary course in human genetics and its social impact. Three lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Biology 301G, 309F, 346. May not be counted toward a degree in the College of Natural Sciences, except for the Bachelor of Science in Human Development and Family Sciences.

#### BIO 301L (TCCN: BIOL 1308). Molecules to Organisms.

Designed for nonscience majors. Introduction to the structure and function of organisms from the molecular to the organ system level; an integrated approach to cell and molecular biology, genetics, development, and physiology of organisms. Three lecture hours and one discussion hour a week for one semester. Biology 301L and 311C may not both be counted; Biology 301L and 311D may not both be counted. Biology 301E and 301L may not both be counted toward a degree in the College of Natural Sciences.

## BIO 301M (TCCN: BIOL 1309). Ecology, Evolution, and Society.

Designed for nonscience majors. Introduction to environmental adaptations, diversity of organisms, species interactions, organization and processes of communities, population growth and limitations, evolution and population genetics, origin of life, and human impact on the environment. Three lecture hours and one discussion hour a week for one semester. Biology 301M and 311D may not both be counted. Biology 301E and 301M may not both be counted. May not be counted toward a degree in the College of Natural Sciences, except for the Bachelor of Science in Human Development and Family Sciences.

#### BIO 102C, 202C, 302C, 402C. Conference Course.

Supervised study of selected subjects in biology, by individual arrangement with the instructor. Conference course. May be repeated for credit. Prerequisite: Varies with instructor.

#### BIO 305F. How Plants Sense and Respond to Stimuli.

Designed for nonscience majors. Exploration of the ways plants sense information about their environment and adapt their growth accordingly; similarities between plant and animal sensory physiology. Three lecture hours a week for one semester. May not be counted toward a degree in the College of Natural Sciences.

## BIO 206L (TCCN: BIOL 1106, BIOL 1107). Introductory Laboratory Experiments in Biology.

The organizing principles of biology (such as molecular and cellular functions, reproduction, development, homeostatic mechanisms, and organismal physiology and behavior) are used within a comparative and evolutionary framework to train students in modern laboratory techniques, bioinformatics, experimental design, and interpretation of results. One lecture hour and four laboratory hours a week for one semester. Prerequisite: Credit or registration for Biology 311C or 311D.

#### BIO 208L. Field Biology.

Field projects, laboratory exercises, field trips, and computer simulation exercises to acquaint students with the principles and applications of ecology and some of the experimental and descriptive methods of ecological investigations. One lecture hour and four laboratory hours a week for one semester. Prerequisite: Credit or registration for Biology 311D.

#### BIO 309D. The Human Body.

Designed for nonscience majors. Introduction to the anatomical systems of the human body, their physiological functions and interrelationships. Three lecture hours and one discussion hour a week for one semester. Biology 309D and 365R may not both be counted. May not be counted by students with credit for Biology 365S. May not be counted toward a degree in the College of Natural Sciences, except for the Bachelor of Science in Human Development and Family Sciences.

#### BIO 311C (TCCN: BIOL 1306). Introductory Biology I.

Introduction to biological energy transformation, cell structure and physiology, and gene expression. Three lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Biology 301L, 211, 311C. Biology 311C and 212 may not both be counted. Prerequisite: Credit or registration for Chemistry 301 or 301H.

#### BIO 311D (TCCN: BIOL 1307). Introductory Biology II.

Introduction to mechanisms of inheritance, evolution, physiology, and species interactions. Three lecture hours and one discussion hour a week for one semester. Biology 301L and 311D may not both be counted. Biology 301M and 311D may not both be counted. Prerequisite: Biology 311C with a grade of at least C-.

#### BIO 315H. Advanced Introduction to Genetics: Honors.

Basic principles of genetics and cell biology. Emphasis on gene structure and regulation; transmission of heritable traits; structure and function of cells; bacterial and viral genetics; and recombinant DNA technology. Three lecture hours and one discussion hour a week for one semester. Prerequisite: A score of 5 on the College Board Advanced Placement Examination in Biology and credit or registration for Chemistry 301 or 301H.

#### BIO 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Biology.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the School of Biological Sciences. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### Upper-Division Courses BIO 320. Cell Biology.

Principles of eukaryotic cell structure and function; macromolecules, membranes, organelles, cytoskeleton, signaling, cell division, differentiation, motility, and experimental methodologies. Three lecture hours and one discussion hour a week for one semester. Prerequisite: Biology 325 or 325H with a grade of at least C-.

#### BIO 320L. Cell Biology Laboratory.

Explores the complex structures and functions of cells through direct observation and experimentation. Subjects may include regulation of gene transcription and translation, protein sorting, organelles and membrane trafficking, cytoskeletal dynamics, and cell division. Use a combination of modern molecular biology, biochemistry, and microscopy techniques, with a strong emphasis placed on hypothesis-driven approaches, proper experimental design, and clear scientific writing and presentation. One lecture hour and five laboratory hours a week for one semester. Prerequisite: The following with a grade of at least C-: Biology 325 or 325H, and Biology 206L, 208L, 226L, or Environmental Sciences 311.

#### BIO 321G. Principles of Computational Biology.

Introduces computational methods for the analysis of nucleic acid and protein sequences, with applications towards biological problems. Performance assessment will be based on experiential learning methods. Three lecture hours and two computer laboratory hours a week for one semester. Prerequisite: The following with a grade of at least C-: Biology 325 or 325H; Statistics and Data Sciences 328M (or Statistics and Scientific Computation 328M); and Mathematics 408C, 408S, or 408R.

#### BIO 321L. Aquatic Entomology.

The taxonomy of aquatic insects; the use of aquatic insects in biomonitoring. Two lecture hours and three laboratory hours a week for one semester. Only one of the following may be counted: Biology 321L, 370C (Topic: Applied Aquatic Entomology), 384K (Topic 13). Prerequisite: The following with a grade of at least C-: Biology 325 or 325H, and Biology 206L, 208L, 226L, or Environmental Science 311.

## BIO 322. Structure, Physiology, and Reproduction of Seed Plants.

The principles of structure and functioning of higher plants; special attention to the dynamics of growth and development and reproduction. Three lecture hours a week for one semester. Prerequisite: Biology 325 or 325H with a grade of at least C-, Chemistry 302 or 302H, and concurrent enrollment in Biology 122L.

## BIO 122L. Structure, Physiology, and Reproduction of Seed Plants Laboratory.

Observation of structure and reproduction in seed plants and employment of experimental techniques that demonstrate physiological processes, especially processes of growth and development. Two laboratory hours a week for one semester. Prerequisite: Concurrent enrollment in Biology 322; and the following with a grade of at least C-: Biology 206L, 208L, 226L or Environmental Sciences 311.

#### BIO 323L. Laboratory Studies in Cell Biology.

Research exercises involving light/electron microscopy, image processing, autoradiography, chromatography, fractionation, flow cytometry, spectroscopy, diffraction, antibody labeling, cell growth, and kinetics. One lecture hour and four laboratory hours a week for one semester. Prerequisite: The following with a grade of at least C-: Biology 325 or 325H, and Biology 206L, 208L, 226L, or Environmental Sciences 311; and credit or registration for Biology 320.

#### BIO 324. Survey of the Plant Kingdom.

Survey of the groups of living and fossil plants, comparing organization and reproduction to understand major shifts in the evolution of plant life. Three lecture hours a week for one semester. Prerequisite: Biology 325 or 325H with a grade of at least C-, and concurrent enrollment in Biology 124L.

#### BIO 124L. Survey of the Plant Kingdom Laboratory.

Hands-on exploration of major plant groups emphasizing organization, reproduction and evolution. Cultures, prepared and living material examined. Local field trips. Designed to pair with Biology 324 lectures. Two laboratory hours a week for one semester. Prerequisite: Concurrent enrollment in Biology 324; and the following with a grade of at least C-: Biology 206L, 208L, 226L or Environmental Sciences 311.

#### **BIO 325. Genetics.**

Basic principles of Mendelism, molecular genetics, structure and function of genes and chromosomes, populations and evolution. Three lecture hours and one discussion hour a week for one semester. Biology 325 and 325H may not both be counted. Prerequisite: Biology 311C and 311D with a grade of at least C- in each.

#### BIO 325H. Genetics: Honors.

Basic principles of genetics and evolution. Emphasis on population genetics and natural selection; structure and function of organ systems; behavioral ecology; and mutational analysis of organismal development. Three lecture hours and one discussion hour a week for one semester. Biology 325 and 325H may not both be counted. Prerequisite: Biology 315H with a grade of at least C-.

#### **BIO 325L. Laboratory Experience in Genetics.**

Experimentation and direct observation in fundamental aspects of transmission genetics. One lecture hour and four laboratory hours a week for one semester. Prerequisite: The following with a grade of at least C-: Biology 325 or 325H, and Biology 206L, 208L, 226L, or Environmental Sciences 311.

#### **BIO 325T. Human Genetics.**

Genomics, cancer genetics, identification and analysis of human disease genes, and monogenic and multifactorial traits in humans. Three lecture hours a week for one semester. Prerequisite: Biology 325 or 325H with a grade of at least C-.

#### BIO 226L. General Microbiology Laboratory.

Introduction to microbiology laboratory techniques and experimental demonstration of principles of microbiology. One lecture and three laboratory hours a week for one semester. Prerequisite: Credit with a grade of at least C- or registration for Biology 326M or 326R.

## BIO 326M. Introductory Medical Microbiology and Immunology.

Designed primarily for nursing and prepharmacy students. Overview of the structure, function, and genetics of bacteria, viruses, and fungi, with emphasis on the interactions between micro-organisms and the human host. Includes principles of microbial pathogenesis, the host's innate and adaptive immune responses to infection, epidemiology, laboratory diagnosis, and antimicrobial chemotherapy and vaccines. Three lecture hours and one discussion hour a week for one semester. Prerequisite: Biology 311C; Biology 325 or 325H with a grade of at least C-; Chemistry 301 with a grade of at least C-; and one of the following with a grade of at least C-: Mathematics 408C, 408K, 408N, 408R, Statistics and Scientific Computation 302.

#### BIO 326R. General Microbiology.

Overview of the major areas of microbiological study, including cell structure and function, genetics, host-microbe interactions, physiology, ecology, diversity, and virology. Three lecture hours and one discussion hour a week for one semester. Prerequisite: Credit with a grade of at least C- or registration for Biology 325 or 325H, and Chemistry 302 or 302H with a grade of at least C-.

#### BIO 327. General Phycology.

A general survey of the algae and of their biology. Three lecture hours a week for one semester. Biology 327 and 388J may not both be counted. Prerequisite: Biology 324, 124L, and 325 or 325H, with a grade of at least C- in each, and concurrent enrollment in Biology 127L.

#### **BIO 327D. Emerging Infectious Diseases.**

Genomic and proteomic tools used to understand the causes of human infectious diseases. Covers genome sequencing, community sequencing, proteomics, microarrays, and human polymorphism analysis; and how these technologies have been applied to the study of important human viral diseases. Also includes extensive coverage of the molecular and clinical biology of these diseases. Three lecture hours a week for one semester. Biology 327D and 337 (Topic: Emerging Infectious Diseases) may not both be counted. Prerequisite: Biology 325 or 325H with a grade of at least C-.

#### **BIO 327E. Epigenetics.**

A study of epigenetic modifications, the covalent modifications of DNA or histones that cause changes in gene expression. Particular attention is given to how experience or environmental factors epigenetically modify health or behavior in animals. Three lecture hours a week for one semester. Biology 327E and 337 (Topic: Epigenetics) may not both be counted. Prerequisite: Biology 325 or 325H with a grade of at least C-.

#### BIO 327G. Genomics.

Genome structure, organization, and function of model organisms; theory and methodology of genetic and physical mapping; sequencing analysis and annotation; genome duplication and evolution; and ethics for biotechnology and cloning. Three lecture hours a week for one semester. Biology 327G and 337 (Topic: Genomics) may not both be counted. Prerequisite: Biology 325 or 325H with a grade of at least C-.

#### BIO 127L. Laboratory in General Phycology.

Survey of various algal groups, including direct observations of their biology, exposure to research techniques, and instruction in culture procedures. Three laboratory hours a week for one semester. Prerequisite: Credit with a grade of at least C- or registration for Biology 327; and the following with a grade of at least C-: Biology 206L, 208L, 226L, or Environmental Sciences 311.

#### BIO 328. Introductory Plant Physiology.

General principles of the mineral nutrition, water relations, metabolic activities, growth and development of green plants. Three lecture hours a week for one semester. Prerequisite: Biology 325 or 325H with a grade of at least C-, and Chemistry 302 or 302H.

#### BIO 328D. Discovery Laboratory in Plant Biology.

Learning methods of experimental design, data gathering, data interpretation, and data presentation, including original experiments relating to questions of current interest in plant physiology. Five laboratory hours a week for one semester. Biology 328D and 337 (Topic: Discovery Laboratory in Plant Biology) may not both be counted. Prerequisite: The following with a grade of at least C-: Biology 325 or 325H, and Biology 206L, 208L, 226L, or Environmental Sciences 311.

#### BIO 128L. Laboratory Experiments in Plant Physiology.

Introduction to experimental techniques used in the study of the mineral nutrition, water relations, metabolic activities, growth, and development of green plants. Three laboratory hours a week for one semester. Prerequisite: Credit with a grade of at least C- or registration for Biology 328; and the following with a grade of at least C-: Biology 206L, 208L, 226L, or Environmental Sciences 311.

#### BIO 329. Medical Mycology.

A basic introduction to medical mycology and an overview of research involving both the fungal zoopathogen and its host. Three lecture hours a week for one semester. Prerequisite: Biology 325 or 325H with a grade of at least C-, and Biology 326R with a grade of at least C-.

#### BIO 129L. Medical Mycology Laboratory.

Basic techniques for the identification and manipulation of fungi of medical importance. Three laboratory hours a week for one semester. Prerequisite: Biology 226L with a grade of at least C-; and credit with a grade of at least C- or registration for Biology 329.

#### BIO 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Biology.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the student abroad adviser in the School of Biological Sciences. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### BIO 330. Molecular Biology of Animal Viruses.

Mechanisms by which viruses replicate and kill or transform cells. Three lecture hours a week for one semester. Prerequisite: Biology 325 or 325H, and 326M or 326R with a grade of at least C- in each.

#### BIO 230L. Virology Laboratory.

Basic experimental techniques applied to selected bacteriophages and animal viruses. Four laboratory hours and one discussion hour a week for one semester. Prerequisite: Biology 226L with a grade of at least C-, and credit with a grade of at least C- or registration for Biology 330.

#### BIO 331L. Laboratory Studies in Molecular Biology.

The methods and principles of molecular biology in a research laboratory context. Students conduct a research project directed by a faculty member. One lecture hour and four and one-half laboratory hours a week for one semester. Prerequisite: The following with a grade of at least C-: Biology 325 or 325H, and Biology 206L, 208L, 226L, or Environmental Sciences 311.

#### BIO 335. Introduction to Biochemical Engineering.

Microorganisms in chemical and biochemical synthesis; genetic manipulation of cells by classical and recombinant DNA techniques. Enzyme technology; design of bioreactors and microbial fermentations; separations of biological products. Three lecture hours a week for one semester. Only one of the following may be counted: Biology 335, Biomedical Engineering 339, Chemical Engineering 339, 379 (Topic: Introduction to Biochemical Engineering). Prerequisite: Biochemistry 339F (or Chemistry 339K) or 369 (or Chemistry 369), and Biology 311C with a grade of at least C-.

#### BIO 336. Tumor Biology.

Covers core aspects of cancer pathology, treatment, epidemiology, the discovery of oncogenes and tumor suppressors, and the molecular genetics underlying the characteristic features of malignant tumors (including metastatic behavior, genomic instability, angiogenesis, cell cycle regulation, and apoptosis). Strong emphasis on the biochemical functions of cancer-related proteins and enzymes and therapeutic approaches based on our understanding of these proteins. Important experimental approaches that have influenced our current understanding of cancer will also be stressed. Three lecture hours a week for one semester. Prerequisite: Biology 325 or 325H with a grade of at least C-; and one of the following with a grade of at least C-: Biochemistry 339F, 369, Biology 330, 360K.

#### BIO 137, 237, 337, 437. Selected Topics in Biology.

Recent developments and research methods in the biological sciences. For each semester hour of credit earned, one lecture hour a week for one semester. Some topics may require additional hours. May be repeated for credit when the topics vary. Prerequisite: Biology 325 or 325H with a grade of at least C-; additional prerequisites vary with the topic.

**Topic 1: Seminar in Human Biology.** One lecture hour a week for one semester. Only offered as Biology 137. Prerequisite: Biology 346 with a grade of at least C-.

**Topic 2: Research Methods: UTeach.** Restricted to students in the UTeach-Natural Sciences program. Students perform independent inquiries and use skills from mathematics and science to solve research problems.

**Topic 3: Natural History of Protists.** A study of protista, a wide variety of eukaryotic organisms which are either unicellular or phylogenetically closely allied to unicellular organisms. Description of the basic taxonomic and ecological groups, and description of the natural history of the major groups of organisms.

#### Topic 4: Computational Neuroscience and Neural Networks.

**Topic 5: Grant Writing and Research Skills**. Explores skills required of research scientists, and specifically prepares students to submit a NSF Graduate Research Fellowship Proposal (NSF-GRFP) grant proposal during the semester (deadline for GRFP submission is typically during the last week of October). There are weekly writing milestones to complete an NSF-GRFP proposal by the submission deadline. Additional prerequisite: Upper-division standing and Statistics and Data Sciences 328M with a grade of at least C-.

**Topic 6: Practical Ethics for Biologists.** Incorporates weekly case studies to introduce common ethical issues faced by biologists in the field and the lab. Employs the Systematic Moral Analysis framework to critically examine ethical issues in scientific inquiry in general (data integrity, who pays for science) as well as issues specific to biologists in the field and laboratory (questionable research practices, conflicts of interest, expertise vs advocacy). Explores issues of personal values, implicit bias and environmental justice.

**Topic 7: Sleep Science.** Explores the basics of sleep science, current research questions and novel approaches, and the range of sleep disorders and their diagnoses. Additional prerequisite: Neuroscience 330 with at least a grade of C-.

#### BIO 337J. Computational Biology Laboratory.

Overview of computational biology, with emphasis on nucleic acid sequence analysis and databases. Class projects and self-learning exercises. Two lecture hours and three computer laboratory hours a week for one semester. Prerequisite: Biology 325 or 325H, and Statistics and Data Sciences 328M (or Statistics and Scientific Computation 328M) with a grade of at least C- in each.

#### **BIO 438L. Animal Communication.**

Animal communication from a multidisciplinary perspective, with emphasis on quantitative analysis, sensory processing, and evolution of signals. Three lecture hours and three laboratory hours a week for one semester, with computer laboratory hours as required. Prerequisite: Biology 325 or 325H with a grade of at least C-, and Biology 359K or 370 with a grade of at least C-.

#### BIO 339. Metabolism and Biochemistry of Microorganisms.

A study of the metabolic processes of microorganisms, using a biochemical approach. Three lecture hours a week for one semester. Biology 339 and 391R may not both be counted. Prerequisite: Biology 326R with a grade of at least C-.

#### BIO 339M. Bacterial Behavior and Signaling Mechanisms.

Advanced studies in how bacteria perceive their environment and communicate with each other. Subjects may include chemotaxis and motility, morphogenesis and development, and secretion and virulence. Taught entirely through reading and discussion of original articles. Three lecture hours a week for one semester. Prerequisite: Biology 325 or 325H with a grade of at least C-, and Biology 326R with a grade of at least C-.

#### BIO 340L. Biology of Birds.

Anatomy, physiology, classification, and ecology of birds. Two lecture hours and three laboratory hours a week for one semester. Prerequisite:

The following with a grade of at least C-: Biology 325 or 325H, and Biology 206L, 208L, 226L, or Environmental Sciences 311.

#### BIO 344. Molecular Biology.

Molecular basis of cellular processes: gene structure and function, DNA replication, RNA and protein synthesis, viruses, molecular aspects of immunology and cancer, and recombinant DNA. Three lecture hours and one discussion hour a week for one semester. Prerequisite: Biology 325 or 325H, and Biochemistry 369 or 339F with a grade of at least a C-.

#### BIO 345E. Endocrinology.

Vertebrate endocrinology (primarily mammalian), with a focus on human pathophysiology. Three lecture hours and one discussion hour a week for one semester. Biology 337 (Topic: Endocrinology) and 345E may not both be counted. Prerequisite: Biology 325 or 325H with a grade of at least C-.

#### BIO 346. Human Biology.

Introduction to human evolution, genetics, sexuality, senescence, and population growth. Three lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Biology 301G, 309F, 346. Prerequisite: Biology 325 or 325H with a grade of at least C-.

#### BIO 446L. Human Microscopic and Gross Anatomy.

Designed for students preparing for biomedical research and the health professions. Focuses on microscopic and gross anatomy of human tissues and organs, with an emphasis on structure function relationships. Subjects include the effects of disease and aging in addition to normal human anatomy. Three lecture hours and four laboratory hours a week for one semester. Prerequisite: The following courses with a grade of at least C-: Biology 325 or 325H; Chemistry 301; and Mathematics 408C, 408K, 408N, 408R, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), or 328M (or Statistics and Scientific Computation 328M).

#### BIO 448L. Invertebrate Biology.

A study of the diversity and evolution of multicellular invertebrate animals, with emphasis on common themes in animal body construction and function. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: The following with a grade of at least C-: Biology 325 or 325H, and Biology 206L, 208L, 226L, or Environmental Science 311.

#### BIO 349. Developmental Biology.

Principles of animal development, with emphasis on developmental mechanisms. Three lecture hours and one discussion hour a week for one semester. Prerequisite: Biology 325 or 325H with a grade of at least C-.

#### BIO 349L. Experiments in Developmental Biology.

An investigation of methods and principles of developmental biology in a laboratory context, with emphasis on animal embryology using molecular techniques and microscopy. One lecture hour and six laboratory hours a week for one semester. Prerequisite: The following with a grade of at least C-: Biology 325 or 325H, and Biology 206L, 208L, 226L, or Environmental Science 311.

#### BIO 350M. Plant Molecular Biology.

Fundamentals of plant molecular biology, including structure and expression of the chloroplast and mitochondrial genomes. Three lecture hours a week for one semester. Biology 350M and 388M may not both be counted. Prerequisite: Biology 325 or 325H with a grade of at least C-.

#### BIO 351. Economic Botany.

An in-depth analysis of the origin of domesticated plant species, the role in nature of plant products, and the ways natural products have been altered through artificial selection. Three lecture hours a week for one semester. Prerequisite: Biology 325 or 325H with a grade of at least C-.

#### BIO 352. Reproductive Biology of Flowering Plants.

Pollination biology, breeding systems, reproductive strategies, and fruit and seed dispersal from evolutionary and ecological vantage points. Three lecture hours a week for one semester. Prerequisite: Biology 325 or 325H with a grade of at least C-.

#### BIO 353F. Field Entomology.

A field course on insects, with emphasis on field study techniques, visual identification of species, collecting techniques, and curation in the field. Meets five days a week for one hour a day during a summersession term; additional fieldwork to be arranged, including extended field trips. Biology 337 (Topic: Field Entomology) and 353F may not both be counted. Prerequisite: The following with a grade of at least C-: Biology 325 or 325H, and Biology 206L, 208L, 226L, or Environmental Science 311.

#### BIO 453L. Entomology.

Characteristics, importance, and biology of the major groups of insects. Two lecture hours and three laboratory hours a week for one semester, with additional fieldwork hours to be arranged. Prerequisite: The following with a grade of at least C-: Biology 325 or 325H, and Biology 206L, 208L, 226L, or Environmental Science 311.

#### BIO 354C. Cell Biology of Human Birth Defects.

Explores the link between basic cell biology, human genetics, and human birth defects using current scientific literature exposing students to critical thinking and the scientific method, as well as the application of these tools to the study of biology. Three lecture hours a week for one semester. Biology 337 (Topic: Developing Biology) and Biology 354C may not both be counted. Prerequisite: Biology 349 with a grade of at least C-.

#### BIO 354L. Ichthyology.

Overview of the evolution, biology, and ecology of fishes, emphasizing freshwater fishes. Three lecture hours and three hours of laboratory or fieldwork a week for one semester, with field trips to be arranged. Prerequisite: The following with a grade of at least C-: Biology 325 or 325H, and Biology 206L, 208L, 226L, or Environmental Science 311.

#### BIO 455L. Vertebrate Natural History.

Phylogeny, taxonomy, life histories, habits, and distribution. Two lecture hours and three hours of laboratory or fieldwork a week for one semester, with field trips to be arranged. Prerequisite: The following with a grade of at least C-: Biology 325 or 325H, and Biology 206L, 208L, 226L, or Environmental Science 311.

#### BIO 456L. Limnology and Oceanography.

Same as Marine Science 440. An introduction to the study of the interactions between aquatic organisms and their environments. Two lecture hours and six laboratory hours a week for one semester. Prerequisite: Chemistry 302 or 302H; and the following with a grade of at least C-: Biology 325 or 325H, and Biology 206L, 208L, 226L, or Environmental Science 311.

#### BIO 357. Evolutionary Ecology.

Principles of modern ecology, particularly as they relate to natural selection and evolutionary theory. Three lecture hours and one discussion hour a week for one semester. Prerequisite: Biology 325 or 325H with a grade of at least C-.

#### BIO 359J. Behavioral Ecology.

Advanced topics in behavioral ecology, with detailed consideration of animal communication, altruism, sexual selection, plant-animal interactions. Three lecture hours and one discussion hour a week for one semester. Prerequisite: Biology 325 or 325H with a grade of at least C-, and Biology 359K or 370 with a grade of at least C-.

#### BIO 359K. Principles of Animal Behavior.

An introduction to the study of animal behavior: descriptive analysis of behavior; physiological basis of behavior; development of behavior; adaptive significance and evolution of behavior; communication and social behavior. Three lecture hours and one discussion hour a week for one semester. Prerequisite: Biology 325 or 325H with a grade of at least C-.

#### BIO 359R. Animal Sexuality.

The biology of sexuality, including genetics, morphology, physiology, and psychology of sex. Three lecture hours and one discussion hour a week for one semester. Prerequisite: Biology 325 or 325H with a grade of at least C-.

#### BIO 360K. Immunology.

The basic concepts of humoral and cell-associated immune phenomena. Three lecture hours a week for one semester. Prerequisite: The following with a grade of at least C-: Biology 325 or 325H, and Biology 326R or 326M.

#### BIO 260L. Immunology Laboratory.

Current techniques in experimental cellular and humoral immunology. One hour lecture and four laboratory hours a week for one semester. Prerequisite: Biology 325 or 325H with a grade of at least C-; Biology 206L, 208L, 226L, or Environmental Science 311 with a grade of at least C-; and credit or registration for Biology 360K.

#### BIO 360M. Molecular Immunology.

An advanced immunology course with an emphasis on molecular models and medical relevance. Three lecture hours a week for one semester. Biology 337 (Topic: Molecular Immunology) and 360M may not both be counted. Prerequisite: Biology 325 or 325H with a grade of at least C-, and Biology 360K with a grade of at least B-.

#### BIO 361. Human Infectious Diseases.

Etiology, pathogenesis, diagnosis, and immunobiology of the major microbial diseases, with emphasis on their prevention. Three lecture hours a week for one semester. Prerequisite: Biology 325 or 325H, and Biology 326M or 326R with a grade of at least C- in each.

#### BIO 361L. Clinical Bacteriology Laboratory.

Training in techniques required for independent work in diagnostic and epidemiological bacteriology. Two lecture hours and five laboratory hours a week for one semester. Prerequisite: The following with a grade of at least C- in each: Biology 325 or 325H; 226L; and 326R or 326M.

#### BIO 361T. Comparative Animal Physiology.

Physiology of organ systems in animal phyla, with special emphasis on physiological adaptations of organisms to their environment. Three lecture hours and one discussion hour a week for one semester. Prerequisite: Biology 325 or 325H with a grade of at least C-.

#### **BIO 463L. Plant Systematics.**

Principles of plant classification, phylogeny, and diversity as exemplified by families and species of flowering plants found seasonally in Texas with an emphasis on the local flora. Two lecture hours and three laboratory hours a week for one semester, with additional field trips to be arranged. Biology 262 and 262L, and 463L may not both be counted. Prerequisite: The following with grades of at least C-: Biology 325 or 325H; and Biology 206L, 208L, 226L, or Environmental Science 311.

#### BIO 364. Microbial Ecology.

Population, community, and ecosystem ecology of microbes and microbiomes. Three lecture hours a week for one semester. Prerequisite: Biology 325 or 325H with a grade of at least C-.

#### BIO 365S. Human Systems Physiology.

Overview of human physiology, including the cardiovascular, respiratory, and renal systems, with an emphasis on critical thinking, integration, and application. Additional subjects include membrane movement, osmolarity and tonicity, endocrinology, and neurophysiology. Three lecture hours and one discussion hour a week for one semester. Prerequisite: Biology 311C; Biology 325 or 325H, and Chemistry 301 or 301H with a grade of at least C- in each; and one of the following with a grade of at least C-: Mathematics 408C, 408K, 408N, 408R, or Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302).

#### BIO 165U. Human Systems Physiology Laboratory.

Offers hands-on experience in human physiology and encourages critical thinking via case study application. Explores the scientific method through the reading of scientific journal articles; writing protocols for basic physiological experiments; and collecting, analyzing, and presenting data. Three laboratory hours a week for one semester. Prerequisite: Biology 325 or 325H with a grade of at least C-, and credit or registration for Biology 365S.

#### **BIO 366. Microbial Genetics.**

Molecular biology of nucleic acids; biosynthesis of macromolecules, transfer of genetic material from cell to cell, recombination, mutagenesis, and regulatory mechanisms. Three lecture hours a week for one semester. Biology 366 and 391S may not both be counted. Prerequisite: Biology 325 or 325H with a grade of at least C-, and Biology 326R with a grade of at least C-.

#### BIO 366R. Molecular Genetics and Medicine.

Implementation of molecular genetics techniques in medicine. Includes application of diagnostic and therapeutic techniques for several genetic disorders and infectious diseases. Three lecture hours a week for one semester. Prerequisite: Biology 325 or 325H with a grade of at least C-.

## BIO 367C. Cellular and Molecular Bases of Neural Development.

An introduction to the principles by which the neural tube (brain and spinal cord) forms during embryonic development. Subjects include the cellular and molecular mechanisms underlying the formation of a three-dimensional neural tube and its division into forebrain, midbrain, hindbrain, and spinal cord. Three lecture hours a week for one semester. Biology 365N and BIO 367C may not both be counted. Prerequisite: One of the following with a grade of at least C-: Biology 325, Neuroscience 330, 365R.

#### BIO 369F. Field Herpetology.

Species identification by sight and sound, and research techniques such as sampling populations, data collection, and analysis. One lecture hour and five laboratory hours a week for one semester, with additional field hours to be arranged. Prerequisite: The following with a grade of at least C-: Biology 325 or 325H, and Biology 206L, 208L, 226L, or Environmental Science 311.

#### BIO 369L. Herpetology.

Biology of amphibians and reptiles, including evolution, ecology, behavior, physiology, life history, and identification. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: The following

with a grade of at least C-: Biology 325 or 325H, and Biology 206L, 208L, 226L, or Environmental Science 311.

#### BIO 370. Evolution.

Introduction to modern evolutionary biology, focusing on the evolution of molecular, developmental, morphological, and behavioral traits. Genetic and ecological bases of evolutionary changes within populations and of evolutionary divergence in animals and plants. Three lecture hours and one discussion hour a week for one semester. Biology 370 and 385K (Topic 2: Evolution) may not both be counted. Prerequisite: Biology 325 or 325H with a grade of at least C-.

#### BIO 170C, 270C, 370C, 470C. Conference Course.

Supervised study of selected topics in biology, by individual arrangement with the instructor. Conference course. May be repeated for credit when the topics vary. Prerequisite: Biology 325 or 325H with a grade of at least C-; additional prerequisites vary with the topic.

#### **BIO 471. Introduction to Systematics.**

Study of diversification of living and fossil organisms, including speciation, biogeography, taxonomy, and phylogeny of genes, species, and higher taxa. The lecture and laboratory include a significant amount of computational molecular phylogenetics. Three lecture hours and three laboratory hours a week for one semester. Biology 458L and 471 may not both be counted. Prerequisite: Biology 325 or 325H, and 370 with a grade of at least C-.

#### BIO 471G. Natural History Museum Science.

An introduction to curatorial practices in natural history museums. Three lecture hours and one discussion hour a week for one semester; students also complete a twenty- to thirty-hour curatorial project. Prerequisite: Biology 325 or 325H with a grade of at least C-.

#### BIO 371L. Experimental Physiology.

Experimental approach to physiological mechanisms by which animals adapt to their environment. One lecture hour, four laboratory hours, and two hours of computer work a week for one semester. Prerequisite: The following with a grade of at least C-: Biology 325 or 325H, and Biology 206L, 208L, 226L, or Environmental Science 311.

#### BIO 372C. Biology Peer Mentors in Research/Teaching.

Students work as peer mentors and assistants in the teaching of biology, with emphasis on developing instructional materials that teach fundamental biology with real world data. Students mentor students for at least three hours a week in addition to other weekly meetings. Biology 372C and Chemistry 372C may not both be counted. Prerequisite: Biology 311C, 311D, and 325, or Biology 315H and 325H, with a grade of at least B in each; and consent of the undergraduate adviser.

#### BIO 373. Ecology.

An introduction to ecology, the study of relationships among organisms and between organisms and their environment; adaptations, population, communities, and ecosystems. Includes both plants and animals and both terrestrial and aquatic ecosystems. Three lecture hours and one discussion hour a week for one semester. Prerequisite: Biology 325 or 325H with a grade of at least C-.

#### BIO 373L. Ecology Laboratory.

Intensive field ecology. Includes group field experiment and observation, independent projects, and field trips to other vegetation zones. Students complete weekly write-ups of observation and data analysis, reports of independent projects, and an oral presentation on an independent project. Four laboratory hours and two workshop/lecture hours a week for one semester. Prerequisite: Credit with a grade of at least C- or registration for Biology 373; and the following with a grade of at least C-: Biology 206L, 208L, 226L, or Environmental Science 311.

#### BIO 374. Plant Anatomy with Histological Techniques.

Tissue organization and cellular details of stems, roots, and leaves of seed plants, with emphasis on development and function. Three lecture hours a week for one semester. Prerequisite: Biology 325 or 325H with a grade of at least C-, and concurrent enrollment in Biology 174L.

## BIO 174L. Laboratory in Plant Anatomy and Histological Techniques.

Demonstration of cellular details and tissue systems of plant organs; instruction in the preparation of plant materials for histological examination. Three laboratory hours a week for one semester. Prerequisite: Credit with a grade of at least C- or registration for Biology 374; and the following with a grade of at least C-: 206L, 208L, 226L, or Environmental Sciences 311.

#### BIO 375. Conservation Biology.

Application of principles of ecology to the preservation of wild plant and animal species and to the preservation, management, and restoration of natural and seminatural ecosystems. Emphasis on scientific, biological aspects of issues such as endangered species protection, preserve design, and forest management. Three lecture hours a week for one semester. Prerequisite: Biology 325 or 325H with a grade of at least C-, and Biology 357, 359J, or 373 with a grade of at least C-.

#### BIO 177, 277, 377. Undergraduate Research.

Laboratory or field research in the various fields of biological science under the supervision of one or more faculty members. Supervised individual research. Up to three semester hours may be counted toward the major requirement for the Bachelor of Arts degree with a major in biology. May be repeated for credit. Prerequisite: Biology 325 or 325H with a grade of at least C-, and written consent of instructor.

#### BIO 478L. Comparative Vertebrate Anatomy.

Study of vertebrate morphology from developmental anatomy to the function, biomechanics, and phylogenetic relationships of living and fossil taxa. Three lecture hours and four laboratory hours a week for one semester. Biology 478L and Kinesiology 324K, 424K may not both be counted. Prerequisite: Biology 325 or 325H with a grade of at least C-.

#### BIO 379H, 679H. Honors Tutorial Course.

Original laboratory or field research project under the direction of a faculty mentor, leading to a thesis or research presentation for students in the honors program in biology. The equivalent of three or six lecture hours a week for one semester. May be repeated for credit, but no more than six hours may be counted toward a degree in biology. Prerequisite: Consent of the student's research supervisor and the departmental honors adviser.

### **Department of Chemistry**

Students seeking the degree of Bachelor of Science in Chemical Engineering, Bachelor of Science in Chemistry, or Bachelor of Science in Physics must take The University of Texas at Austin Test for Credit in Chemistry 301 if they were admitted to the University with high school credit in chemistry. Engineering majors in areas other than chemical engineering are also encouraged to take the test. Students with three semesters or more of high school chemistry that included laboratory experience, or credit for Chemistry 301 or 301H, are encouraged to take The University of Texas at Austin Test for Credit in Chemistry 302. These tests are offered only in Austin. Information about them is available at https://testingservices.utexas.edu/sts. Each student planning to register for a chemistry course should consult an adviser in his or her major area to determine whether specific courses are required.

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

### **Chemistry: CH**

#### **Lower-Division Courses**

#### CH 301 (TCCN: CHEM 1311). Principles of Chemistry I.

Three lecture hours a week for one semester; some sections may also require one enrichment/discussion hour a week. Only one of the following may be counted: Chemistry 301, 301H, 304K. Prerequisite: An appropriate score on the Department of Chemistry placement examination.

#### CH 301H. Principles of Chemistry I: Honors.

Three lecture hours a week for one semester. Only one of the following may be counted: Chemistry 301, 301H, 304K. Prerequisite: Credit with a grade of at least C- or registration for one of the following: Mathematics 408C, 408D, 408K, 308L, 408L, 408M, 408N, 408R, 408S.

#### CH 302 (TCCN: CHEM 1312). Principles of Chemistry II.

Development and application of concepts, theories, and laws underlying chemistry. Three lecture hours a week for one semester. Some sections also require one enrichment/discussion hour a week. Only one of the following may be counted: Chemistry 302, 302H, 305. Prerequisite: Chemistry 301 or 301H with a grade of at least C-.

#### CH 302H. Principles of Chemistry II: Honors.

Three lecture hours a week for one semester. Only one of the following may be counted: Chemistry 302, 302H, 305. Prerequisite: Chemistry 301H with a grade of at least C-; credit with a grade of at least C- or registration for one of the following: Mathematics 408C, 408D, 408K (or 308K), 308L, 408L, 408M, 408N, 408R, or 408S.

#### CH 303. Mathematical Introduction to Theories of Matter.

Introduction to the quantum theoretic description of atoms, molecules, solids, nuclei, elementary particles, and cosmology. Matrix mechanics and group theory. Three lecture hours a week for one semester. Chemistry 303 may be used instead of either Chemistry 302 or Chemistry 301 and 302 in fulfilling the prerequisites of other chemistry courses, except by students seeking the Bachelor of Science in Chemistry degree. Chemistry 303 may be counted in addition to Chemistry 301 and 302. Not recommended by the Health Professions Office for Medical College Admission Test preparation.

## CH 204 (TCCN: CHEM 1111, CHEM 1112). Introduction to Chemical Practice.

Introduction to the techniques of modern experimental chemistry. Designed to provide basic laboratory and analytical skills. May include organic, analytical, and physical chemistry, as well as materials science. Four laboratory hours and one hour of discussion a week for one semester. Some sections may also require one hour of computer laboratory a week. Only one of the following may be counted: Chemistry 204, 317, or 104M and 104N. Prerequisite: Credit with a grade of at least C- or registration for Chemistry 302 or 302H.

#### CH 304K. Chemistry in Context I.

Designed for nonscience majors. Chemistry 304K and 305 form a twosemester sequence designed to fulfill the science requirement for students not majoring in science or engineering. Issues of contemporary interest and importance, such as ozone depletion and global warming, motivate the discussion; the underlying chemistry is developed as needed. Social, political, economic, and ethical implications of scientific developments and science policy are considered. Chemistry 304K addresses the nature of matter, energy, chemical reactions, and chemical thermodynamics. Not intended as preparation for Chemistry 301. Three lecture hours a week for one semester. May not be counted toward a degree in the College of Natural Sciences. Only one of the following may be counted: Chemistry 301, 301H, 304K.

#### CH 104M. Introduction to Chemical Practice I.

Introduction to the techniques of modern experimental chemistry. Designed to provide basic laboratory and analytical skills. May include organic, analytical, and physical chemistry, as well as materials science. One lecture hour and three laboratory hours a week for one semester. Only one of the following may be counted: Chemistry 204, 317, or 104M and 104N. Prerequisite: Credit with a grade of at least C- or registration for Chemistry 301 or 301H.

#### CH 104N. Introduction to Chemical Practice II.

Introduction to the techniques of modern experimental chemistry. Designed to provide basic laboratory and analytical skills. May include organic, analytical, and physical chemistry, as well as materials science. One lecture hour and three laboratory hours a week for one semester. Only one of the following may be counted: Chemistry 204, 317, or 104M and 104N. Prerequisite: Credit with a grade of at least a C- or registration for Chemistry 302 or 302H; and credit with a grade of at least C- in the following coursework: Chemistry 104M, and Chemistry 301 or 301H.

#### CH 305. Chemistry in Context II.

Designed for nonscience majors. Chemistry 304K and 305 form a two-semester sequence designed to fulfill the science requirement for students not majoring in science or engineering. Chemistry 305 addresses water chemistry, acids and bases, elementary organic chemistry, polymers, pharmaceuticals, nutrition, and genetics. Three lecture hours a week for one semester. May not be counted toward a degree in the College of Natural Sciences. Only one of the following may be counted: Chemistry 302, 302H, 305. Prerequisite: Chemistry 301 or 304K.

#### CH 206K. Undergraduate Research.

Introduction to research practices; supervised individual undergraduate research in chemistry. Six to ten laboratory hours a week for one semester. May be repeated for credit, but no more than four semester hours may be counted toward a degree in chemistry. Hours beyond four must be taken on the pass/fail basis. May be repeated for credit. Prerequisite: Consent of the undergraduate adviser in chemistry.

#### CH 107, 207. Conference Course.

Supervised study in chemistry. One discussion hour a week for one semester, with additional hours to be arranged. May not be counted toward a major or minor in chemistry. May be repeated for credit when the topics vary. Offered on the pass/fail basis only.

## CH 207K. Introduction to Science Outreach in Elementary Schools.

Developing and presenting level-appropriate science laboratories to students in local elementary schools. A hands-on, discovery learning approach to science is emphasized. The equivalent of five lecture hours a week for one semester, with field hours to be arranged. May be counted as an elective only.

#### CH 207L. Peer Teaching.

Students act as peer teaching assistants in other University chemistry courses, mainly large general chemistry lecture sections. Two hours of lecture and training a week for one semester, and two to three hours a week leading student group discussions. May not be counted toward any degree in chemistry. Prerequisite: Chemistry 301 and consent of the coordinator of the Peer Teaching Assistant Program.

#### CH 108, 208, 308, 408. Topics in Chemistry.

For each semester hour of credit earned, one lecture hour a week for one semester; some topics may require additional discussion hours. May not be counted toward a major or minor in chemistry. May be repeated for credit when the topics vary. Offered on the pass/fail basis only.

#### CH 110K (TCCN: CHEM 2123). Organic Chemistry Laboratory.

Primarily for premedical, predental, life sciences, and pharmacy majors. One lecture hour and three laboratory hours a week for one semester. Prerequisite: Credit with a grade of at least C- in the following coursework: Chemistry 302 or 302H, 204, 317, or 104M and 104N; and credit or registration for one of the following: Chemistry 320M or 328M.

#### CH 110L (TCCN: CHEM 2125). Organic Chemistry Laboratory.

Primarily for premedical, predental, life sciences, and pharmacy majors. One lecture hour and three laboratory hours a week for one semester. Prerequisite: Chemistry 110K.

#### CH 317. Descriptive Inorganic Chemistry.

Synthesis and properties of inorganic, bioinorganic, and organometallic compounds. One lecture hour and six laboratory hours a week for one semester. Only one of the following may be counted: Chemistry 204, 317, or 104M and 104N. Prerequisite: Credit with a grade of at least C- or registration for Chemistry 302 or 302H.

#### CH 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Chemistry.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Chemistry. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### **Upper-Division Courses**

#### CH 220C. Organic Chemistry Laboratory.

One lecture hour and five laboratory hours a week for one semester. Only one of the following may be counted: Chemistry 110L, 220C, 128L. Prerequisite: Credit with a grade of at least C- or registration for Chemistry 320N; and the following coursework with a grade of at least Cin each: Chemistry 204, 317, or 104M and 104N; and 320M or 328M.

#### CH 320M. Organic Chemistry I.

Primarily for premedical, predental, life sciences, and pharmacy majors. Development of organic chemical structure, nomenclature, and reactivity. Three lecture hours a week for one semester. Chemistry 320M and 328M may not both be counted. Prerequisite: Chemistry 302 or 302H with a grade of at least C-.

#### CH 320N. Organic Chemistry II.

Primarily for premedical, predental, life sciences, and pharmacy majors. The development of organic chemical functional group reactivity, reaction mechanics, with analogous aqueous transformations in biochemical settings. Three lecture hours a week for one semester. Chemistry 320N and 328N may not both be counted. Prerequisite: The following coursework with a grade of at least C-: Chemistry 320M, or 328M.

#### CH 128K. Organic Chemistry Laboratory.

One lecture hour and three laboratory hours a week for one semester. May not be counted by students with credit for Chemistry 220C. Only one of the following may be counted: Chemistry 110K or 128K. Prerequisite: Credit with a grade of at least C- or registration for Chemistry 328M; and the following coursework with a grade of at least C- in each: Chemistry 302 or 302H; and 204, 317, or 104M and 104N.

#### CH 128L. Organic Chemistry Laboratory.

One lecture hour and three laboratory hours a week for one semester. May not be counted by students with credit for Chemistry 210C or 220C. Only one of the following may be counted: Chemistry 110L, 118L, 128L. Prerequisite: Credit or registration for Chemistry 318N or 328N; and the following coursework with a grade of at least C- in each: Chemistry 118K or 128K; and 318M or 328M.

#### CH 328M. Organic Chemistry I.

Primarily for chemistry and chemical engineering majors. The development of organic chemical structure, nomenclature, and reactivity. Three lecture hours a week for one semester. Chemistry 320M and 328M may not both be counted. Prerequisite: The following coursework with a grade of at least C-: Chemistry 302 or 302H; and 204, 317, or 104M and 104N.

#### CH 328N. Organic Chemistry II.

Primarily for chemistry and chemical engineering majors. The development of organic chemical reactivity, with an emphasis on synthesis and polymers. Three lecture hours a week for one semester. Chemistry 320N and 328N may not both be counted. Prerequisite: The following coursework with a grade of at least C- in each: Chemistry 328M and 128K.

#### CH 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Chemistry.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Chemistry. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### CH 329W. Cooperative Chemistry/Biochemistry.

This course covers the work period of chemistry and biochemistry students in the Cooperative Education program, which provides supervised work experience by arrangement with the employer and the supervising instructor. Forty laboratory hours a week for one semester. The student must repeat the course each work period and must take it twice to receive credit toward the degree; at least one of these registrations must be during a long-session semester. No more than three semester hours may be counted toward the major requirement; no more than six semester hours may be counted toward the degree. The student's first registration must be on the pass/fail basis. Prerequisite: Application to become a member of the Cooperative Chemistry/Biochemistry Program, and consent of the Department of Chemistry and Biochemistry undergraduate adviser.

#### CH 431. Inorganic Chemistry.

Survey of the chemistry of the elements, incorporating both descriptive and theoretical aspects. Open-ended experiments designed to illustrate a variety of synthetic techniques. Three lecture hours and three laboratory hours a week for one semester. Prerequisite: The following coursework with a grade of at least C- in each: Chemistry 302 or 302H; Chemistry 204, 317, or 104M and 104N; and Chemistry 320M or 328M.

#### CH 341. Special Topics in Laboratory Chemistry.

Examples of topics are physical measurements techniques; electronics for scientists; advanced synthetic chemistry (organic or inorganic); separation techniques. One lecture hour and six laboratory hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Eight semester hours of coursework in organic chemistry and consent of the undergraduate adviser.

#### CH 644. Chemical Education: Secondary School.

Issues and techniques in secondary school teaching of chemical sciences. Three lecture hours a week for two semesters. For students seeking the Bachelor of Science in Chemistry: Teaching Option degree. May not be counted toward any other degree in chemistry or biochemistry. Prerequisite: For 644A, eight semester hours of coursework in organic chemistry and credit or registration for Chemistry 144K; for 644B, Chemistry 644A, 144K, and credit or registration for Chemistry 144L.

#### CH 144K. Chemical Education Laboratory I.

Development of classroom demonstrations, laboratory experiments, and teaching aids for secondary school teaching of the chemical sciences. Two laboratory hours a week for one semester. For students seeking the Bachelor of Science in Chemistry: Teaching Option degree. May not be counted toward any other degree in chemistry. Prerequisite: Credit or registration for Chemistry 644A.

#### CH 144L. Chemical Education Laboratory II.

Development of classroom demonstrations, laboratory experiments, and teaching aids for secondary school teaching of the chemical sciences. Two laboratory hours a week for one semester. For students seeking the Bachelor of Science in Chemistry: Teaching Option degree. May not be counted toward any other degree in chemistry. Prerequisite: Credit or registration for Chemistry 644B.

#### CH 353. Physical Chemistry I.

For chemistry and chemical engineering majors. Equations of state, laws of thermodynamics, ideal and nonideal solutions, phase equilibria, thermodynamics of chemical reactions. Three lecture hours a week for one semester. Chemistry 353 and 353M may not both be counted. Prerequisite: Mathematics 408C and 408D, or two of the following: Mathematics 408K, 408L, 408M, 408N, 408S; Chemistry 302 or 302H with a grade of at least C-; and Physics 316 and 116L, 303L and 103N, or 317L and 117N.

#### CH 153K. Physical Chemistry Laboratory.

Three laboratory hours a week for one semester. Prerequisite: Chemistry 353 or 353M with a grade of at least C-.

#### CH 353M. Physical Chemistry I for Life Sciences.

For biochemistry and biology majors. Thermochemistry and kinetics of reactions in cells, enzyme catalysis, electrical and transport properties of membranes. Three lecture hours a week for one semester. Chemistry 353 and 353M may not both be counted. Prerequisite: Mathematics 408C and 408D, or two of the following: Mathematics 408K, 408L, 408M, 408N, 408S; Chemistry 302 or 302H with a grade of at least C-; and Physics 316 and 116L, 303L and 103N, or 317L and 117N.

#### CH 354. Quantum Chemistry and Spectroscopy.

Fundamental principles of quantum mechanics, exactly soluble model problems, electronic structure of atoms and molecules, spectroscopy. Three lecture hours a week for one semester. Prerequisite: Mathematics 408C and 408D, or two of the following: Mathematics 408K, 408L, 408M, 408N, 408S; and Physics 316 and 116L.

#### CH 154K. Physical Chemistry Laboratory.

Three laboratory hours a week for one semester. Prerequisite: Chemistry 153K, and 353 or 353M with a grade of at least C-; and credit or registration for Chemistry 354 or 354L.

#### CH 354L. Physical Chemistry II.

Molecular energy levels, statistical thermodynamics (macroscopic thermodynamic functions from molecular input), and physical and chemical kinetics, with emphasis on the molecular viewpoint. Three lecture hours a week for one semester. May be counted toward a degree in chemistry. Chemistry 354, rather than this course, is recommended for students planning graduate study in chemistry. Prerequisite: Chemistry 353 or 353M with a grade of at least C-.

## CH 354M. Introduction to Computational Methods in Chemistry.

Construction and implementation of numerical algorithms for solving differential equations which are common in chemistry. Subjects include chemical reaction rates, quantum mechanics, molecular dynamics, normal modes of vibration, and Monte Carlo methods. Three lecture hours a week for one semester. Only one of the following may be counted: Chemistry 354M, 368 (Topic: Applied Math and Computation in Chemistry), 368 (Topic: Computational Chemistry), 368 (Topic: Intro to Computational Methods in Chemistry). Prerequisite: The following coursework with a grade of at least C- in each: Chemistry 302 or 302H, and Chemistry 353 or 353M.

#### CH 354S. Elements of Spectroscopy.

Primarily for chemistry and biochemistry majors. Fundamentals of spectroscopy, with knowledge of elementary quantum mechanics. Separation of electronic, vibrational, rotational and spin quantum states; interaction of radiation and matter; theory and application of different types of spectroscopy including photoelectron, electronic absorption and emission, vibrational (infrared and Raman), rotational and magnetic resonance. Three lecture hours a week for one semester. Prerequisite: The following coursework with a grade of at least C- in each: Chemistry 353 or 353M, and 354 or 354L.

#### CH 455. Fundamentals of Analytical Chemistry.

For biochemistry, engineering, and clinical laboratory science majors. Chemical and instrumental methods in analytical chemistry. Three lecture hours and three laboratory hours a week for one semester. Chemistry 455 and 456 may not both be counted. Prerequisite: The following coursework with a grade of at least C- in each: Chemistry 302 or 302H; and Chemistry 204, 317, or 104M and 104N.

#### CH 456. Analytical Chemistry.

For chemistry majors. Three lecture hours and three laboratory hours a week for one semester. Chemistry 455 and 456 may not both be counted. Prerequisite: The following coursework with a grade of at least C- in each: Chemistry 302 or 302H; and Chemistry 204, 317, or 104M and 104N.

## CH 366C. Advanced Inorganic Chemistry: Organometallics Catalysis.

An in-depth and mostly chronological study of the evolution of organometallic and inorganic coordination chemistry, and its continued critical importance in a range of industrial processes. Covers a range of topical catalytic processes, paying particular attention to how chemical bonding and kinetics can be exploited to affect the relative rates of reaction. Three lecture hours a week for one semester. Chemistry 366C and 368 (Topic: Advanced Inorganic Chemistry: Organometallic Chemistry and Catalysis) may not both be counted. Prerequisite: Credit with a grade of at least C- in Chemistry 431.

#### CH 366D. Bio-inorganic Chemistry and Spectroscopy.

Covers the roles of transition metals in biology, mostly with respect to protein structure, function, and catalysis. Also covers methods of spectroscopy that are used to probe the geometrical and electronic structure of metal ions in proteins. Exposure to modern areas of study in bio-inorganic chemistry. Explores the principles of transition metal chemistry in the context of biological systems. Three lecture hours a week for one semester Chemistry 366D and 368 (Topic: Bio-inorganic Chemistry) may not both be counted. Prerequisite: Chemistry 431 with a grade of at least C-.

#### CH 366E. Chemistry of the s-, p-, d-, and f-Block Elements.

Focuses on the electronic structure of molecules and complexes, and how such information can predict important properties such as chemical reactivity, spectroscopy, and magnetism. Intended for upper-division chemistry majors with a basic understanding of concepts in inorganic chemistry. Three lecture hours a week for one semester. Chemistry 366E and 368 (Topic: Inorganic Reactions and Structures) may not both be counted. Prerequisite: Credit with a grade of at least C- for Chemistry 431.

#### CH 367C. Materials Chemistry.

Restricted to chemistry majors. Introduction to structural and physical properties of materials and synthetic strategies for making new materials in the nanoscale and mesoscale regimes, in addition to covering instrumental methods used to probe materials properties. Some aspects of applications (semiconductor devices, solar and fuel cells, smart and responsive materials) will be covered to illustrate the kinds of material properties that need to be considered in designing novel materials of specific function. Three lecture hours a week for one semester. Prerequisite: Upper-division standing, and Chemistry 302 and 353 with a grade of at least C- in each. Chemistry 431 or 354L with a grade of at least C- is recommended.

#### CH 367L. Macromolecular Chemistry.

Designed for chemistry and chemical engineering students. Occurrence, preparation, structure, and properties of macromolecular substances. Three lecture hours a week for one semester. Prerequisite: Credit with a grade of at least C- in the following coursework: Chemistry 320M and 320N, or 328M and 328N; Chemistry 220C, or 128K and 128L; and Chemistry 353 or 353M.

#### CH 368. Advanced Topics in Chemistry.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: The following coursework with a grade of at least C- in each: Chemistry 320M and 320N, or Chemistry 328M and 328N; credit with a grade of at least C- or registration for Chemistry 353 or 353M.

**Topic 1: Research Methods: UTeach.** Restricted to students in the UTeach-Natural Sciences program. Students use mathematics and science skills to solve research problems.

Topic 2: Advanced Topic in Analytical Chemistry.

Topic 3: Advanced Topic in Inorganic Chemistry.

Topic 4: Advanced Topic in Organic Chemistry.

Topic 5: Advanced Topic in Physical Chemistry.

#### CH 368L. Peer Teaching.

Equivalent of three lecture hours a week for one semester. Chemistry 368 (Topic: Peer Teaching) and 368L may not both be counted.

#### CH 369K. Techniques of Research.

Advanced laboratory practice and introduction to research. One lecture hour and six laboratory hours a week for one semester. May be taken for a letter grade no more than twice. No more than six semester hours may be counted toward a degree in chemistry or biochemistry. May be repeated for credit. Prerequisite: Eight semester hours of coursework in organic chemistry; and six semester hours of upper-division chemistry courses approved by the undergraduate adviser's office, or consent of the undergraduate adviser in chemistry.

#### CH 371K. Science Outreach in Elementary Schools.

Students develop and present level-appropriate science laboratories to students in local elementary schools. Students also plan and create the infrastructure needed to administer the science program in concert with the science curriculum at a specific elementary school. A handson, discovery learning approach to science is emphasized. One class hour and six hours of fieldwork a week for one semester. May be taken for a letter grade no more than twice. No more than six semester hours may be counted toward a degree in chemistry. May be repeated for credit. Prerequisite: Upper-division standing, at least six hours of upperdivision coursework in the College of Natural Sciences, and consent of the UTeach adviser in the College of Natural Sciences.

#### CH 372C. Chemistry Peer Mentors in Research and Teaching.

Students work as peer mentors and assistants in the teaching of chemistry, with emphasis on developing instructional materials and laboratories that teach fundamental chemistry with real world data. Students mentor students for at least six hours a week in addition to other weekly meetings. Hours to be arranged. May be taken for a letter grade no more than twice. No more than six semester hours may be counted toward a degree in chemistry. Biology 372C and Chemistry 372C may not both be counted. May be repeated for credit. Prerequisite: Chemistry 301 or 301H, and 302 or 302H with a grade of at least B in each; and consent of the undergraduate adviser.

## CH 372S. Study and Research Abroad: Austin International Framework.

Designed specifically for students participating in the AIF program. Facilitates student-led mini-seminars and video conference call discussions. Explores student research and wider learning and cultural experiences in Austin and abroad. Three lecture hours a week for one semester. May be repeated for credit. Prerequisite: Enrollment in the Austin International Framework (AIF) program and consent of the instructor.

#### CH 375K, 475K. Individual Study in Chemistry.

Supervised reading or individual tutorial sessions on advanced topics in chemistry. Three or four class hours a week for one semester. No more than six semester hours may be counted toward a degree in chemistry. May be repeated for credit. Prerequisite: Eight semester hours of coursework in organic chemistry, Chemistry 353, and consent of the undergraduate adviser.

#### CH 376K. Advanced Analytical Chemistry.

Two lecture hours and three laboratory hours a week for one semester. Prerequisite: Chemistry 353 and 456 with a grade of at least C- in each.

#### CH 379H. Chemistry Honors Tutorial Course.

Laboratory research project in a specific field of chemistry under the supervision of one or more faculty members. Conference course. May be taken twice for credit. Must be taken in addition to the required hours for the Bachelor of Science in Chemistry degree. Students must enter no later than the first semester of the year of graduation. May be repeated

for credit. Prerequisite: Consent of the student's research supervisor and the departmental honors adviser.

### **Department of Computer Science**

An undergraduate may not enroll in any computer science course more than once without written consent of an undergraduate adviser in computer science. No student may enroll in any computer science course more than twice. No student may take more than three upperdivision computer science courses in a semester without written consent of an undergraduate adviser in computer science.

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

### **Computer Science: C S**

#### **Lower-Division Courses**

#### C S 301K. Foundations of Logical Thought.

Introductory logic in the context of computing; introduction to formal notations; basic proof techniques; sets, relations, and functions. Three lecture hours a week for one semester. Some sections also require one discussion hour a week.

#### C S 302. Computer Fluency.

An introduction to the fundamental concepts of computing: how computers work, what they can do, and how they can be used effectively. Some programming is required. Three lecture hours or two lecture hours and one discussion hour a week for one semester. Credit for Computer Science 302 may not be earned after a student has received credit for Computer Science 303E, 305J, 307, 312, 312H, 314, or 314H. May not be counted toward a degree in computer science.

#### C S 303E. Elements of Computers and Programming.

Problem solving and fundamental algorithms for various applications in science, business, and on the World Wide Web, and introductory programming in a modern object-oriented programming language. The equivalent of three lecture hours a week for one semester. Only one of the following may be counted: Computer Science 303E, 305J, 312, 312H. Credit for Computer Science 303E may not be earned after a student has received credit for Computer Science 307, 314, or 314H. May not be counted toward a degree in computer science.

#### C S 103F. Ethical Foundations of Computer Science.

An introduction to reasoning about the effects of the technology created by computer scientists and understanding the ethical and real-world consequences of that technology. Emphasizes direct participation and discussion using case studies to illustrate ethical topics. One lecture hour a week for one semester. Computer Science 103F and 109 (Topic: Ethical Foundations of Computer Science) may not both be counted.

#### C S 104C. Competitive Programming.

Explores the algorithms needed to solve a given problem, reason about corner cases, and write correct implementations under time pressure. Focuses on skills useful for international programming competitions, whiteboard job interviews, and programming tasks that require quickly solving challenging problems with creative use of algorithms. One lecture hour a week for one semester. Computer Science 104 and 109 (Topic: Competitive Programming) may not both be counted. Prerequisite: Computer Science 311 or 311H with a grade of at least C-,

and registration or credit in Computer Science 314 or 314H with a grade of at least C-.

#### C S 105C. Computer Programming: C++.

Explores the syntax and concepts needed to program in C++. One lecture hour a week for one semester. Prerequisite: Computer Science 307, 313E, 314, 314H, or Electrical Engineering 422C, with a grade of at least C-.

#### C S 105P. Topics In Computer Programming Languages.

An introduction to programming in a particular computer language. Includes designing and implementing programs. One lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Computer Science 307, 313E, 314, 314H, or Electrical Engineering 422C, with a grade of at least C-, and consent of instructor.

#### C S 108. Software Systems.

Introduction to the use of a particular software system. Students build applications that exploit the system being studied. One lecture hour a week for one semester. May be repeated for credit when the topics vary. Offered on the pass/fail basis only. Prerequisite: Computer Science 307, 313E, 314, 314H, or Electrical Engineering 422C, with a grade of at least C-.

#### C S 109, 209, 309. Topics in Computer Science.

For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

#### C S 311. Discrete Mathematics for Computer Science.

Restricted to computer science majors. A focus on discrete mathematical tools of fundamental importance to the working computer scientist. An emphasis is placed on using logical notation to express rigorous mathematical arguments. Subjects include proof by induction, introduction to graph theory, recurrences, sets, functions, and an introduction to program correctness. Three lecture hours a week for one semester. Only one of the following may be counted: Computer Science 311, 311H, 313H, 313K, 336, 336H. Prerequisite: The following coursework with a grade of at least C- in each: Computer Science 312 or 312H; and Mathematics 408C, 408K, or 408N, or registration for Mathematics 408C.

## C S 311H. Discrete Mathematics for Computer Science: Honors.

Restricted to honors computer science majors. A focus on discrete mathematical tools of fundamental importance to the working computer scientist. An emphasis is placed on using logical notation to express rigorous mathematical arguments. Subjects include proof by induction, graph theory, number theory, combinatorics, recurrences, sets, functions, an introduction to program correctness, and discrete probability. Three lecture hours a week for one semester. Only one of the following may be counted: Computer Science 311, 311H, 313H, 313K, 336, 336H. Prerequisite: Mathematics 408K or 408N with a grade of at least C-; or registration or credit with at least C- in M 408C.

#### C S 312. Introduction to Programming.

First part of a two-part sequence in programming. Fundamental concepts of structured programming; procedures and data structures with a focus on problem solving strategies and implementation; introduction to concepts of informal specification, informal reasoning about program behavior, debugging, and ad hoc testing. Three lecture hours and one discussion hour a week for one semester. Only one of the following courses may be counted: Computer Science 303E, 305J, 312, 312H. Credit for Computer Science 312 may not be earned after a student has received credit for Computer Science 314 or

314H. Prerequisite: Credit with a grade of at least C- or registration for Mathematics 408C, 408K, or 408N.

#### C S 312H. Introduction to Programming: Honors.

Restricted to computer science majors. First part of a two-part sequence in programming. Fundamental concepts of structured programming; procedures and data structures with a focus on problem solving strategies and implementation; introduction to concepts of informal specification, informal reasoning about program behavior, debugging, and ad hoc testing. Three lecture hours and one discussion hour a week for one semester. Only one of the following courses may be counted: Computer Science 303E, 305J, 312, 312H. Credit for Computer Science 312H may not be earned after a student has received credit for Computer Science 314 or 314H. Prerequisite: Credit with a grade of at least C- or registration for Mathematics 305G, or a passing score on the College of Natural Sciences mathematics placement examination; and consent of the honors director.

#### C S 313E. Elements of Software Design.

Object-oriented design of software using Python, a modern high-level language. Introduction to abstract data types, fundamental algorithms, and basics of complexity analysis. Three lecture hours a week for one semester. May not be counted toward a degree in computer science. Prerequisite: Computer Science 303E, 305J, 312, or 312H with a grade of at least C-.

#### C S 314. Data Structures.

Second part of a two-part sequence in programming. Introduction to specifications, simple unit testing, and debugging; building and using canonical data structures; algorithm analysis and reasoning techniques such as assertions and invariants. Three lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Computer Science 307, 314, 314H, 315, 315H. Prerequisite: Computer Science 312 or 312H with a grade of at least C-.

#### C S 314H. Data Structures: Honors.

Second part of a two-part sequence in programming. Introduction to specifications, simple unit testing, and debugging; building and using canonical data structures; algorithm analysis and reasoning techniques such as assertions and invariants. Three lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Computer Science 307, 314, 314H, 315, and 315H. Prerequisite: Computer Science 312 or 312H with a grade of at least C-.

#### C S 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Computer Science.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Computer Science. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### **Upper-Division Courses**

## C S 120N, 220N, 320N. Topics in Computer Science for Nonmajors.

For each semester hour of credit earned, one lecture hour a week for one semester. May not be counted toward a degree in computer science. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

#### C S 323E. Elements of Scientific Computing.

Fundamentals of software issues related to scientific computing. Subjects include floating-point computations, numerical computation errors, interpolation, integration, solution of linear systems of equations, optimization, and initial value problems of ordinary differential equations. Implementation of algorithms are investigated using MATLAB for matrix and vector computations. Examples are drawn from a variety of science and mathematics areas. Three lecture hours a week for one semester. May not be counted toward a degree in computer science. Computer Science 323E and 323H may not both be counted. Prerequisite: The following coursework with a grade of at least C-: Computer Science 303E and 313E, or Computer Science 307, 312, 312H, 314, 314H, 315, or 315H; Electrical Engineering 422C; Mathematics 408D, 408M, or 427L; and credit with a grade of at least C- or registration for Mathematics 340L, 341, or Statistics and Scientific Computation 329C.

#### C S 323H. Elements of Scientific Computing: Honors.

Fundamentals of software issues related to scientific computing. Subjects include floating-point computations, numerical computation errors, interpolation, integration, solution of linear systems of equations, optimization, and initial value problems of ordinary differential equations. Implementation of algorithms are investigated using MATLAB for matrix and vector computations. Examples are drawn from a variety of science and mathematics areas. Three lecture hours a week for one semester. May not be counted toward a degree in computer science. Computer Science 323E and 323H may not both be counted. Prerequisite: Computer Science 303E, 305J, 307, 312, 312H, 315, or 315H with a grade of at least C-; credit with a grade of at least C- or registration for Mathematics 340L, 341, or Statistics and Scientific Computation 329C; and consent of the honors director.

#### C S 324E. Elements of Graphics and Visualization.

Basics of two- and three-dimensional computer graphics systems, modeling and rendering, and selected graphics software APIs. Other topics may include interactive graphics, animation, graphical user interfaces, and the graphical presentation of information. Three lecture hours a week for one semester. May not be counted toward a degree in computer science. Prerequisite: One of the following with a grade of at least C-: Computer Science 303E, 305J, 307, 312, 312H, 314, 314H, 315, 315H, Electrical Engineering 422C.

#### C S 326E. Elements of Networking.

Introduction to the principles and basic concepts of the Internet, networking applications and protocols, and simple client/server applications. Other topics may include network technologies and topologies, packet and circuit switching, LANS and WANS, Internet security, and network management. Three lecture hours a week for one semester. May not be counted toward a degree in computer science. Prerequisite: One of the following with a grade of at least C-: Computer Science 303E, 305J, 307, 312, 312H, 314, 314H, 315, 315H, Electrical Engineering 422C.

#### C S 327E. Elements of Databases.

A practical introduction to database management systems, with discussion of database administration and management. Survey of logical modeling, database design with a focus on relational databases, SQL query language, and current applications. Subjects may include data integrity, performance, concurrency, transaction processing, recovery, security, and Web applications. Three lecture hours a week for one semester. May not be counted toward a degree in computer science. Prerequisite: One of the following with a grade of at least C-: Computer Science 303E, 305J, 307, 312, 312H, 314, 314H, 315, 315H, Electrical Engineering 422C.

#### C S 328E. Topics in Elements of Computing.

Three lecture hours a week for one semester. May not be counted toward a degree in computer science. May be repeated for credit when the

topics vary. Prerequisite: Computer Science 303E, 312, or 312H with a grade of at least C-.

#### C S 429. Computer Organization and Architecture.

Restricted to computer science majors. An introduction to low-level computer design ranging from the basics of digital design to the hardware/software interface for application programs. Includes basic systems principles of pipelining and caching, and requires writing and understanding programs at multiple levels. Four lecture hours and two discussion hours a week for one semester. Only one of the following may be counted: Computer Science 310, 310H, 429, 429H. Prerequisite: The following courses with a grade of at least C-: Computer Science 311 (or 313K) or 311H (or 313H); and Computer Science 314 (or 315) or 314H (or 315H).

#### C S 329E. Advanced Topics in Elements of Computing.

Three lecture hours a week for one semester. May not be counted toward a degree in computer science. May be repeated for credit when the topics vary. Prerequisite: Computer Science 313E, 314, or 314H with a grade of at least C-.

#### C S 429H. Computer Organization and Architecture: Honors.

Restricted to computer science majors. An introduction to low-level computer design ranging from the basics of digital design to the hardware/software interface for application programs. Includes basic systems principles of pipelining and caching, and requires writing and understanding programs at multiple levels. Four lecture hours and two discussion hours a week for one semester. Only one of the following may be counted: Computer Science 310, 310H, 429, 429H. Prerequisite: The following coursework with a grade of at least C- in each: Computer Science 311, 311H, 313H, or 313K; Computer Science 314, 314H, 315, or 315H.

#### C S 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Computer Science.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Computer Science. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### C S 329W. Cooperative Computer Science.

This course covers the work period of computer science students in the Cooperative Education program, which provides supervised work experience by arrangement with the employer and the supervising instructor. Forty laboratory hours a week for one semester. The student must repeat the course each work period and must take it twice to receive credit toward the degree; at least one of these registrations must be during a long-session semester. However, no more than three semester hours may be counted toward the major requirement. The student's first registration must be on the pass/fail basis; the second must be on the letter-grade basis. Prerequisite: The following coursework with a grade of at least C- in each: Computer Science 311, 311H, 313H, or 313K; 307, 314, 314H, 315, or 315H; 310, 310H, 429, or 429H; and consent of the undergraduate adviser.

#### C S 331. Algorithms and Complexity.

An investigation of algorithmic paradigms: divide and conquer, dynamic programming, greedy algorithms, graph algorithms, randomized algorithms, undecidability, NP-completeness, and approximation algorithms. Three lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Computer Science 331, 331H, 357, 357H, 378 (Topic: Algorithms and Complexity).

Prerequisite: The following coursework with a grade of at least C-: Computer Science 429 (or 310) or 429H (or 310H); Mathematics 362K or Statistics and Data Sciences 321 (or Statistics and Scientific Computation 321); and credit with a grade of at least C- or registration for. Mathematics 340L, 341, or Statistics and Data Sciences 329C (or Statistics and Scientific Computation 329C).

#### C S 331H. Algorithms and Complexity: Honors.

An investigation of algorithmic paradigms: divide and conquer, dynamic programming, greedy algorithms, graph algorithms, randomized algorithms, undecidability; NP-completeness, approximation algorithm, sorting lower bound, selected topics from amortized analysis, network flow, and linear programming. Three lecture hours and one hour of discussion a week for one semester. Only one of the following may be counted: Computer Science 331, 331H, 357, 357H, 378 (Topic: Algorithms and Complexity). Prerequisite: The following coursework with a grade of at least C-: Computer Science 429 (or 310) or 429H (or 310H); Mathematics 362K or Statistics and Data Sciences 321 (or Statistics and Scientific Computation 321); and credit with a grade of at least C- or registration for. Mathematics 340L, 341, or Statistics and Data Sciences 329C (or Statistics and Scientific Computation 329C).

#### C S 234. Technical Writing.

Application of techniques and strategies of effective technical writing, and of conventions used in documents such as letters, memos, proposals, abstracts, and reports. Two lecture hours a week for one semester. Computer Science 234 and 178 (Topic: Technical Writing) may not both be counted. May not be counted toward the number of hours in computer science required for the Bachelor of Science in Computer Science degree. Prerequisite: Computer Science 310, 310H, 429, or 429H with a grade of at least C-.

#### C S 337. Theory in Programming Practice.

Application of program-analysis theory to program design. Methodologies for large-scale program design. Designed to help students bring together theoretical and programming skills. Three lecture hours and one discussion hour a week for one semester. Computer Science 337 and 337H may not both be counted. Prerequisite: The following coursework with a grade of at least C-: Computer Science 429 (or 310) or 429H (or 310H); and 331 (or 357), 331H (or 357H), 341, or 341H.

#### C S 337H. Theory in Programming Practice: Honors.

Application of program-analysis theory to program design. Methodologies for large-scale program design. Designed to help students bring together theoretical and programming skills. Three lecture hours and one discussion hour a week for one semester. Computer Science 337 and 337H may not both be counted. Prerequisite: The following coursework with a grade of at least C-: Computer Science 429 (or 310) or 429H (or 310H); and 331 (or 357), 331H (or 357H), 341, or 341H.

#### C S 439. Principles of Computer Systems.

Restricted to computer science majors. An introduction to computer systems software abstractions with an emphasis on the connection of these abstractions to underlying computer hardware. Key abstractions include threads, virtual memory, protection, and I/O. Requires writing of synchronized multithreaded programs and pieces of an operating system. Four lecture hours and two discussion hours a week for one semester. Only one of the following may be counted: Computer Science 439, 439H, 352, 352H, 372, and 372H. Prerequisite: Computer Science 310, 310H, 429, or 429H with a grade of at least C-.

#### C S 439H. Principles of Computer Systems: Honors.

Restricted to computer science majors. An introduction to computer systems software abstractions with an emphasis on the connection of these abstractions to underlying computer hardware. Key abstractions include threads, virtual memory, protection, and I/O. Requires writing of synchronized multithreaded programs and pieces of an operating system. Four lecture hours and two discussion hours a week for one semester. Only one of the following may be counted: Computer Science 439, 439H, 352, 352H, 372, and 372H. Prerequisite: Computer Science 310, 310H, 429, or 429H with a grade of at least C-.

#### C S 340D. Debugging Verifying Programs.

Basic concepts of formal methods with emphasis on using and applying mathematical logic plus finite state systems theory to program verification and debugging. Three lecture hours a week for one semester. Computer Science 340D and 378 (Topic: Debugging and Verifying Programs) may not both be counted. Prerequisite: Computer Science 429 (or 310) or 429H (or 310H) with a grade of at least C-.

#### C S 341. Automata Theory.

An introduction to the formal study of automata and of related formal languages with applications in computer science. Three lecture hours a week for one semester. Only one of the following may be counted: Computer Science 341, 341H, Linguistics 340. Prerequisite: Computer Science 429 (or 310) or 429H (or 310H) with a grade of at least C-.

#### C S 341H. Automata Theory: Honors.

An introduction to the formal study of automata and of related formal languages with applications in computer science. Three lecture hours a week for one semester. Only one of the following may be counted: Computer Science 341, 341H, Linguistics 340. Prerequisite: Computer Science 429 (or 310) or 429H (or 310H) with a grade of at least C-, and consent of the honors director.

#### C S 342. Neural Networks.

Biological information processing; architectures and algorithms for supervised learning, self-organization, reinforcement learning, and neuroevolution; deep learning, recurrent, and memory networks; hardware implementations and simulators; applications in engineering, artificial intelligence, and cognitive science. Three lecture hours a week for one semester. Prerequisite: Computer Science 429 (or 310) or 429H (or 310H) with a grade of at least C-.

#### C S 342C. Computational Brain.

An examination of the brain as a computational system composed of different layers of abstraction. Focus on scientific writing, with weekly reviews of relevant scientific papers. Three lecture hours a week for one semester Computer Science 342C and 378 (Topic: Computational Brain) may not both be counted. Prerequisite: The following coursework with a grade of at least C- in each: Computer Science 429 (or 310) or 429H (or 310H); and Mathematics 362K or Statistics and Data Sciences 321 (or Statistics and Scientific Computation 321).

#### C S 343. Artificial Intelligence.

An introduction to the field of artificial intelligence (AI), starting from foundations in search and knowledge representation, and then sampling from major AI topics such as probabilistic reasoning, intelligent agents (including for games), machine learning, planning, natural language processing, robotics, computer vision, and philosophical foundations. Programming projects are required. Three lecture hours a week for one semester. Only one of the following may be counted: Computer Science 343, 343H, 378H (Topic: Artificial Intelligence: Honors). Prerequisite: The following coursework with a grade of at least C- in each: Computer Science 429 (or 310) or 429H (or 310H); and Mathematics 362K or Statistics and Data Sciences 321 (or Statistics and Scientific Computation 321).

#### C S 343H. Artificial Intelligence: Honors.

An introduction to the field of artificial intelligence (AI), starting from foundations in search and knowledge representation, and then sampling from major AI topics such as probabilistic reasoning, intelligent agents (including for games), machine learning, planning, natural language processing, robotics, computer vision, and philosophical foundations. Programming projects are required. Three lecture hours a week for one semester. Only one of the following may be counted: Computer Science 343, 343H, 378H (Topic: Artificial Intelligence: Honors). Prerequisite: The following coursework with a grade of at least C- in each: Computer Science 429 (or 310) or 429H (or 310H); and Mathematics 362K or Statistics and Data Sciences 321 (or Statistics and Scientific Computation 321).

#### C S 344M. Autonomous Multiagent Systems.

An introduction to autonomous agents, with an emphasis on multiagent systems. Students use a robotics simulator. Emphasis on computer science research activities, including speaking, writing, programming, and working in groups. Three lecture hours a week for one semester. Computer Science 344M and 378 (Topic: Autonomous Multiagent Systems) may not both be counted. Prerequisite: The following coursework with a grade of at least C- in each: Computer Science 429 (or 310) or 429H (or 310H); and Mathematics 362K or Statistics and Data Sciences 321 (or Statistics and Scientific Computation 321).

#### C S 344R. Robotics.

A survey of methods and techniques important for intelligent robotics. Students work in teams, applying these methods to get intelligent behavior from physical robots. Three lecture hours a week for one semester. Computer Science 344R and 378 (Topic: Robotics) may not both be counted. Prerequisite: The following coursework with a grade of at least C- in each: Computer Science 429 (or 310) or 429H (or 310H); and Mathematics 362K or Statistics and Data Sciences 321 (or Statistics and Scientific Computation 321).

#### C S 345. Programming Languages.

Survey of significant concepts underlying modern programming languages, including syntax, functions, expressions, types, polymorphism, assignment, procedures, pointers, encapsulation, classes, and inheritance, with some discussion of implementation issues. Prominent programming paradigms, such as sequential, concurrent, object-oriented, functional, and logic programming. Illustrative examples drawn from a variety of current languages. Three lecture hours a week for one semester. Computer Science 345 and 345H may not both be counted. Prerequisite: Computer Science 429 (or 310) or 429H (or 310H) with a grade of at least C-.

#### C S 345H. Programming Languages: Honors.

A survey of significant concepts underlying modern programming languages, including syntax, functions, expressions, types, polymorphism, assignment, procedures, pointers, encapsulation, classes, and inheritance, with some discussion of implementation issues. Prominent programming paradigms, such as sequential, concurrent, object-oriented, functional, and logic programming. Illustrative examples drawn from a variety of current languages. Three lecture hours a week for one semester. Computer Science 345 and 345H may not both be counted. Prerequisite: Computer Science 429 (or 310) or 429H (or 310H) with a grade of at least C-.

#### C S 346. Cryptography.

A theoretical introduction to cryptography. Subjects include private key cryptosystems, public key cryptosystems, digital signatures, secret

sharing schemes, and the necessary mathematical background. Three lecture hours a week for one semester. Prerequisite: The following coursework with a grade of at least C-: Computer Science 429 (or 310) or 429H (310H); 331 (or 357), 331H (or 357H), 341, or 341H; and credit with a grade of at least C- or registration for. Mathematics 340L, 341, or Statistics and Data Sciences 329C (or Statistics and Scientific Computation 329C).

#### C S 347. Data Management.

Concepts of database design and database system implementation. Data models, query processing, database design theory, crash recovery, concurrent control, and distributed databases. Three lecture hours a week for one semester. Prerequisite: Computer Science 429 (or 310) or 429H (or 310H) with a grade of at least C-.

#### C S 349. Contemporary Issues in Computer Science.

An examination of social, professional, and ethical issues involved in the use of computer technology. Subjects may include software engineering ethics, computer safety and reliability, constitutional issues, intellectual property, computer crime, societal impact, emerging technologies, and philosophical issues. Three lecture hours a week for one semester. Computer Science 349 and 378 (Topic: Contemporary Issues in Computer Science) may not both be counted. Prerequisite: Computer Science 429 (or 310) or 429H (or 310H) with a grade of at least C-.

#### C S 350C. Advanced Computer Architecture.

Relationships between programming and hardware design, high performance and low power microarchitectures, memory system design, technology and workload constraints on design, special techniques for coding, addressing, and control, and evaluation of design alternatives will be explored. Three lecture hours a week for one semester. Only one of the following may be counted: Computer Science 350C, 352, or 352H. Prerequisite: Computer Science 429 (or 310) or 429H (or 310H) with a grade of at least C-.

#### C S 350F. Operating Systems.

Advanced coverage of core operating systems (virtual memory, file systems, scheduling), and intermediate and advanced operating systems concepts: multiprocessing, multi-core computing, linking, kernel design, virtual machines, and security. Three lecture hours a week for one semester. Only one of the following may be counted: Computer Science 350F, 372, or 372H. Prerequisite: Computer Science 439 (or 352 or 372) or 439H (or 352H or 372H) with a grade of at least C-.

#### C S 353. Theory of Computation.

An introduction to computability theory and computational complexity, focusing on the limits of computation. Subjects include undecidability, NP-completeness, time and space complexity, circuit complexity, and randomized complexity. Three lecture hours a week for one semester. Prerequisite: One of the following with a grade of at least C-: Computer Science 331 (or 357), 331H (or 357H), 341, or 341H.

#### C S 354. Computer Graphics.

Introduction to techniques for human-machine communication through imagery. Subjects include display hardware, transformations, interactive techniques, geometric modeling, two- and three-dimensional display algorithms, graphics software systems architecture, and hidden-line and surface elimination. Projects are assigned and in-depth exploration is encouraged. Three lecture hours a week for one semester. Prerequisite: The following courses with a grade of at least C-: Computer Science 429 (or 310) or 429H (or 310H); Computer Science 105C, 371G or 371P; Mathematics 408D, 408M, or 427L; and Mathematics 340L, 341, or Statistics and Data Sciences 329C.

#### C S 354R. Game Technology.

An examination of major technological components of computer games and their integration, modeling and animation, physics simulation, networking for games, interface and interaction techniques, and special effects. Three lecture hours a week for one semester. Computer Science 354R and 378 (Topic: Game Technology) may not both be counted. Prerequisite: The following coursework with a grade of at least C-: Computer Science 105C, 371G or 371P; and Computer Science 429 (or 310) or 429H (or 310H).

## C S 354S. Game Development Capstone: Two-Dimensional Games.

Same as Music 354S and Theatre and Dance 354T (Topic 17). Participation in an interdisciplinary team to gain a thorough understanding of the two-dimensional game development process, through modeling of the environment and practices that are used in game studios. Three lecture hours a week for one semester. Only one of the following may be counted: Computer Science 354S, 378 (Topic: Game Development Capstone: 2D Games), Music 354S, 376J (Topic: Game Development Capstone: 2D Games), Theatre and Dance 354T (Topic 17). Prerequisite: For computer science majors, Computer Science 429 or 429H with a grade of at least C- and consent of instructor; for others, consent of instructor.

## C S 354T. Game Development Capstone: Three-Dimensional Games.

Same as Music 354T and Theatre and Dance 354T (Topic 18). Participation in interdisciplinary teams to gain a thorough understanding of the three-dimensional game development process, through modeling of the environment and practices that are used in game studios. Three lecture hours a week for one semester. Only one of the following may be counted: Computer Science 354T, Music 354T, 376J (Topic: Game Development Capstone: 3D Games), Theatre and Dance 354T (Topic 18). Prerequisite: For computer science majors, Computer Science 429 or 429H with a grade of at least C- and consent of instructor; for others, consent of instructor.

#### C S 356. Computer Networks.

Introduction to computer networks with emphasis on the Internet. Three lecture hours a week for one semester. Prerequisite: Computer Science 439 (or 372) or 439H (or 372H) with a grade of at least C-.

#### C S 356R. Introduction to Wireless Networks.

An introduction to basic knowledge in wireless networks ranging from the physical layer to the application layer, and across different types of wireless networks such as WiFi, cellular, and multihop networks. Three lecture hours a week for one semester. Computer Science 356R and 378 (Topic: Introduction to Wireless Networks) may not both be counted. Prerequisite: Computer Science 429 (or 310) or 429H (or 310H) with a grade of at least C-.

#### C S 361. Introduction to Computer Security.

An introduction to computer security, both in the abstract and in the context of real systems, including recognizing potential threats to confidentiality, integrity and availability, and developing familiarity with current security-related issues in computer science. Three lecture hours a week for one semester. Computer Science 361 and 378 (Topic: Introduction to Security) may not both be counted. Prerequisite: Computer Science 429 (or 310) or 429H (or 310H) with a grade of at least C-.

#### C S 361C. Information Assurance and Security.

Selected subjects from the broad area of information assurance, including computer security, communications security, operations security, and risk assessment. Three lecture hours a week for one semester. Computer Science 361C and 378 (Topic: Information Assurance and Security) may not both be counted. Prerequisite: Computer Science 429 (or 310) or 429H (or 310H) with a grade of at least C-.

#### C S 361S. Network Security and Privacy.

An examination of common computer security threats; fundamental techniques for implementing secure software systems and networks; practical experience in attacking and defending networked systems. Three lecture hours a week for one semester. Computer Science 361S and 378 (Topic: Network Security and Privacy) may not both be counted. Prerequisite: Computer Science 439 (or 352 or 372) or 439H (or 352H or 372H) with a grade of at least C-.

#### C S 363D. Introduction to Data Mining.

Introduction to the topic of data mining: data preprocessing regression, classification, clustering, dimensionality reduction, association analysis, and anomaly detection. Three lecture hours a week for one semester. Computer Science 363D and 378 (Topic: Introduction to Data Mining) may not both be counted. Prerequisite: The following coursework with a grade of at least C-: Computer Science 429 (or 310) or 429H (or 310H); Mathematics 362K or Statistics and Data Sciences 321 (or Statistics and Scientific Computation 321); and Mathematics 340L, 341, or Statistics and Data Sciences 329C (or Statistics and Scientific Computation 329C).

#### C S 367. Numerical Methods.

Subjects include systems of linear equations, numerical integration, ordinary differential equations, and nonlinear equations. Construction and use of large numerical systems. Influence of data representation and computer architecture on algorithm choice and development. Three lecture hours a week for one semester. Only one of the following may be counted: Computer Science 367, Mathematics 368K, Physics 329. Prerequisite: The following coursework with a grade of at least C-: Computer Science 429 (or 310) or 429H (or 310H); Mathematics 408D, 408M, or 427L; and Mathematics 340L, 341, or Statistics and Data Sciences 329C (or Statistics and Scientific Computation 329C).

#### C S 369. Systems Modeling.

Introduction to performance modeling, with emphasis on computer systems. Modeling methodology, queueing network models, simulation, analysis of results. Three lecture hours a week for one semester. Prerequisite: The following coursework with a grade of at least C-: Computer Science 429 (or 310) or 429H (or 310H); and Mathematics 362K or Statistics and Data Sciences 321 (or Statistics Scientific Computation 321).

#### C S 370. Undergraduate Reading and Research.

Supervised study of selected problems in computer science, by individual arrangement with supervising instructor. The equivalent of three lecture hours a week for one semester. Computer Science 370 and 370F may not both be counted. No more than three semester hours may be counted toward a degree in computer science. Prerequisite: Computer Science 429 (or 310) or 429H (or 310H) with a grade of at least C-, and consent of the undergraduate adviser.

#### C S 370F. Undergraduate Reading and Research: Writing.

Supervised study of selected problems in computer science, by individual arrangement with supervising instructor. The equivalent of three lecture hours a week for one semester. Computer Science 370 and 370F may not both be counted. No more than three semester hours may be counted toward a degree in computer science. Prerequisite: Computer Science 429 (or 310) or 429H (or 310H) with a grade of at least C-, and consent of the undergraduate adviser.

#### C S 371D. Distributed Computing.

Investigation of models, principles, and fundamental protocols, including event ordering and global predicate detection, atomic commit, statemachine replication, rollback recovery, primary backup, consensus for synchronous and asynchronous systems, and byzantine fault-tolerance. Three lecture hours a week for one semester. Prerequisite: Computer Science 439 (or 372) or 439H (or 372H) with a grade of at least C-.

#### C S 371G. Generic Programming and the STL.

Three lecture hours a week for one semester. Computer Science 371G and 378 (Topic: Generic Programming and the STL) may not both be counted. Prerequisite: Computer Science 429 (or 310) or 429H (or 310H) with a grade of at least C-.

#### C S 371L. iOS Mobile Computing.

Overview of mobile computing with an emphasis on developing applications for the iOS operating system. Three lecture hours a week for one semester. Computer Science 371L and 378 (Topic: iOS Mobile Computing) may not both be counted. Prerequisite: Credit with a grade of at least C- or registration in Computer Science 439 (or 352 or 372) or 439H (or 352H or 372H).

#### C S 371M. Mobile Computing.

Overview of mobile computing. Emphasis on mobile application development. Use of mobile capabilities: sensors, location, telephony, and multimedia. Three lecture hours a week for one semester Computer Science 371M and 378 (Topic: Mobile Computing) may not both be counted. Prerequisite: Computer Science 429 (or 310) or 429H (or 310H) with a grade of at least C-; and credit with a grade of at least C- or registration for Computer Science 439 (or 352 or 372) or 439H (or 352H or 372H).

#### C S 371P. Object-Oriented Programming.

Programming using class derivation, inheritance, and dynamic polymorphism. Application of a simple object-oriented design methodology to several software development problems. Three lecture hours a week for one semester. Prerequisite: Computer Science 429 (or 310) or 429H (or 310H) with a grade of at least C-.

#### C S 371R. Information Retrieval and Web Search.

Introduction to traditional and recent methodologies for indexing, processing, querying, and classifying unstructured and semi-structured textual data, including hypertext and World Wide Web documents. Three lecture hours a week for one semester. Computer Sciences 371R and 378 (Topic: Intelligent Information Retrieval and Web Search) may not both be counted. Prerequisite: Computer Science 429 (or 310) or 429H (or 310H) with a grade of at least C-.

#### C S 371S. Object-Oriented Software Engineering.

Object-oriented formulations of software systems as executable specifications, object-oriented analysis, design of software architectures, translation of high-level specification systems. Three lecture hours a week for one semester. Prerequisite: Computer Science 429 (or 310) or 429H (or 310H) with a grade of at least C-.

#### C S 373. Software Engineering.

Introduction to current knowledge, techniques, and theories in large software system design and development. Three lecture hours a week for one semester. Prerequisite: Computer Science 429 (or 310) or 429H (or 310H) with a grade of at least C-.

#### C S 373S. Software Design.

Model-driven engineering, UML metamodels and constraints, model transformatons, object-oriented refactorings, design patterns, object-oriented frameworks and plug-ins, layered and dataflow architectural

styles, map-reduce parallel software architectures, and service-oriented architectures. Three lecture hours a week for one semester Computer Science 373S and 378 (Topic: Software Design) may not both be counted. Prerequisite: Computer Science 429 (or 310) or 429H (or 310H) with a grade of at least C-.

#### C S 374L. Longhorn Startup.

Focus on skill development and mentoring in startup formation, technology development, market validation, marketing, sales, operations, human resources, program management, and finance. Emphasis on written and oral presentation of startup activities. Three lecture hours a week for one semester. Only one of the following may be counted: Computer Science 374L, 378 (Topic: Longhorn Startup), Electrical Engineering 377E, Engineering Studies 377E, Management 337 (Topic: Interdisciplinary Entrepreneurship), 337 (Topic 2). Prerequisite: Upperdivision standing, Computer Science 429 (or 310) or 429H (or 310H) with a grade of at least C-, and consent of instructor.

#### C S 375. Compilers.

An examination of formal description of languages, lexical analysis, syntax analysis, syntax-directed translation, run-time system management, code generation, code optimization, compiler-building tools. Three lecture hours a week for one semester. Prerequisite: Computer Science 429 (or 310) or 429H (or 310H) with a grade of at least C-.

#### C S 376. Computer Vision.

Explores computer vision, a discipline that develops methods that enable machines to interpret or analyze images and videos. Includes the study of image formation, feature detection, segmentation, multiple-view geometry, recognition and learning, and motion and tracking. Three lecture hours a week for one semester. Computer Science 376 and 378 (Topic: Computer Vision) may not both be counted. Prerequisite: The following coursework with a grade of at least C-: Computer Science 429 (or 310) or 429H (or 310H); Mathematics 340L, 341, or Statistics and Data Sciences 329C (or Statistics and Data Sciences 321 (or Statistics and Scientific Computation 321).

## C S 377. Principles and Applications of Parallel Programming.

Models of parallel computation, fundamental concepts for representation of parallel computation structures, study of representative parallel programming systems, and programming of parallel algorithms and computations. Three lecture hours a week for one semester. Prerequisite: Computer Science 439 (or 372) or 439H (or 372H) with a grade of at least C-.

#### C S 377P. Programming for Performance.

Investigation on the performance-critical features of modern computer architectures and how applications can take advantage of them to obtain high performance. Three lecture hours a week for one semester. Computer Science 377P and 378 (Topic: Programming for Performance) may not both be counted. Prerequisite: Computer Science 429 (or 310) or 429H (or 310H) with a grade of at least C-.

#### C S 178, 378. Undergraduate Topics in Computer Science.

One or three lecture hours a week for one semester. Only one of the following may be counted unless the topics vary: Computer Science 178, 378, 178H, 378H. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites vary with the topic.

## C S 178H, 378H. Undergraduate Topics in Computer Science: Honors.

For each semester hour of credit earned, one lecture hour a week for one semester. Only one of the following may be counted unless the topics vary: Computer Science 178, 378, 178H, 378H. May be repeated for credit when the topics vary. Prerequisite: Computer Science 429 (or 310) or 429H (or 310H) with a grade of at least C-.

#### C S 379H. Computer Science Honors Thesis.

Directed reading, research, and/or projects in areas of computer science, under supervision of a faculty member, leading to an honors thesis. The thesis must be approved by a committee of three readers. The equivalent of three lecture hours a week for one semester, by arrangement with a faculty member. Prerequisite: The following coursework with a grade of at least C- in each: Computer Science 311, 311H, 313H, or 313K; Computer Science 314, 314H, 315, or 315H; Computer Science 310, 310H, 429, or 429H; Mathematics 408C, 408K, or 408N; nine additional semester hours of upper-division coursework in computer science; and consent of the student's research supervisor and the departmental honors adviser.

### School of Human Ecology

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

# Human Development and Family Sciences: HDF

#### **Lower-Division Courses**

#### HDF 304 (TCCN: TECA 1303). Family Relationships.

Same as Women's and Gender Studies 301 (Topic 4). The process of family interaction over the life cycle. Application of research findings to the understanding of relationships. Only one of the following may be counted: Human Development and Family Sciences 304, 304H, Women's and Gender Studies 301 (Topic 4).

#### HDF 304H. Family Relationships: Honors.

The process of family interaction over the life cycle. Application of research findings to the understanding of relationships. Three lecture hours a week for one semester. Only one of the following may be counted: Human Development and Family Sciences 304, 304H, Women's and Gender Studies 301 (Topic 4). Offered on the letter-grade basis only. Prerequisite: Consent of the department.

#### HDF 312. Family Resource Management.

Management concepts and theory in resource allocation used to meet family and life demands. Three lecture hours a week for one semester. Prerequisite: Credit or registration for Human Development and Family Sciences 304.

#### HDF 313 (TCCN: TECA 1354). Child Development.

Same as Women's and Gender Studies 313. Motor, language, cognitive, social, and emotional development in the family context. Three lecture hours a week for one semester. Only one of the following may be counted: Human Development and Family Sciences 313, 313H, Women's and Gender Studies 301 (Topic 5), 313. Prerequisite: Credit or registration for Human Development and Family Sciences 113L, and Psychology 301 with grade of at least C-.

#### HDF 313H. Child Development: Honors.

Motor, language, social, and emotional development of children in the family context, with an emphasis on research findings and evaluations. Three lecture hours a week for one semester. Only one of the following may be counted: Human Development and Family Sciences 313, 313H, Women's and Gender Studies 301 (Topic 5: Child Development). Offered on the letter-grade basis only. Prerequisite: Psychology 301 with a grade of at least B-, credit or registration for Human Development and Family Sciences 113L, and consent of the department.

#### HDF 113L. Child Development Laboratory.

Students observe children at the University Child and Family Laboratory and relate their observations to the issues discussed in Human Development and Family Sciences 313 and 313H. One and one-half laboratory hours a week for one semester. Prerequisite: Psychology 301 with a grade of at least C- and credit or registration for Human Development and Family Sciences 313 or 313H.

## HDF 315L. Research Methods in Human Development and Family Sciences.

Survey of research methods, including observational and experimental techniques. Three lecture hours a week for one semester. Prerequisite: Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302); credit with a grade of at least C- or registration for Human Development and Family Sciences 304 or 304H, 313 or 313H, and 113L.

#### HDF 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Human Development and Family Sciences.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the School of Human Ecology. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### HDF 322. Personal and Family Finance.

Overview from the individual and family perspectives of financial planning tools, cash management, consumer credit, basic tax preparation, and insurance selection. Includes application of knowledge to hypothetical situations and case studies. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### HDF 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Human Development and Family Sciences.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the School of Human Ecology. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### HDF 335. Adult Development.

Adulthood and the development, changes, and maturation that occurs, including the impact of relationships in adulthood. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and Human Development and Family Sciences 313 and 113L.

#### HDF 337. Personal Relationships.

Studies intimate relationships, including dating, cohabitation, marriage, and gay and lesbian relationships, as well as situational factors that

may influence basic relationship processes. Three lecture hours a week for one semester. Prerequisite: Upper-division standing; Human Development and Family Sciences 304 or 304H, and 315L with a grade of at least C- in each.

## HDF 338. Developmentally Appropriate Practices with Young Children.

Developmentally appropriate practices, the importance of play, arranging environments, material selection, and a basic understanding about centers and activities for young children. Three lecture hours a week for one semester, with an additional three to six hours of fieldwork sometime during the semester. Prerequisite: Upper-division standing; and a grade of at least C- in one of the following: Human Development and Family Sciences 313 and 113L, 313H and 113L, or Psychology 304.

## HDF 340. Ethical, Philosophical, and Professional Development Issues.

Explores ethical and philosophical issues; personal values and choices; professional development and leadership; and career goals, opportunities, and challenges as they relate to human development and family sciences. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

## HDF 342. Development of Psychopathology from Infancy through Adolescence.

A developmental approach to the study of emotional and behavioral disorders from infancy through adolescence, including attachment disorders, autism, attention deficit disorder, conduct disorder, phobias, obsessive-compulsive disorder, depression, eating disorders, and schizophrenia. Also includes contrasting theories of psychopathology, epidemiology and outcomes of childhood disorders, therapeutic approaches and their efficacy, and developmental resilience. Three lecture hours a week for one semester. Human Development and Family Sciences 342 and Psychology 339 may not both be counted. Prerequisite: Upper-division standing; Human Development and Family Sciences 313 or 313H, and 113L with a grade of at least C- in each.

## HDF 343. Human Development in Minority and Immigrant Families.

Examines the theories of human development and cultural psychology as they apply to the developmental issues of minority and immigrant children and families. Three lecture hours a week for one semester. Human Development and Family Sciences 343 and 378K (Topic: Child Development in Minority and Immigrant Families) may not both be counted. Prerequisite: Upper-division standing and Human Development and Family Sciences 313 or 313H, 113L, and 315L with a grade of at least C- in each.

#### HDF 345. Peer Relationships.

Children's peer relationships from toddlerhood to adolescence. Three lecture hours a week for one semester. Human Development and Family Sciences 345 and 378K (Topic: Peer Relationships) may not both be counted. Prerequisite: Upper-division standing; Human Development and Family Sciences 313 or 313H, 113L, and 315L with a grade of at least C-in each.

#### HDF 347. Socioeconomic Problems of Families.

An analysis of how socioeconomic factors, including income, education, employment, and their intersection with race and gender affect child development and family functioning. Three lecture hours a week for one semester. Prerequisite: Upper-division standing, and six semester hours of coursework in anthropology, economics, education, human development and family sciences, psychology, social work, or sociology.

#### HDF 351. Infant Development and Attachment Relationships.

The development of emerging social language and cognitive capacities during infancy and toddlerhood and the development and consequences in infant-caregiver attachment security. Three lecture hours a week for one semester. Prerequisite: Upper-division standing; and Human Development and Family Sciences 313 or 313H, 113L, and 315L, with a grade of at least C- in each.

#### HDF 352. Field Experience: Community.

Practicum in applied settings concerning human development and family sciences. One lecture hour and ten to twelve hours of fieldwork a week for one semester. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: Upper-division standing; a University grade point average of at least 2.00; the following coursework with a grade of at least C- in each course: Human Development and Family Sciences 304 or 304H, 313 or 313H, 113L, 315L, and 340; Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302); Mathematics 408C, 408N, 408R, or Statistics and Data Sciences 332; and nine additional semester hours of upper-division coursework in human development and family sciences. Admission by application only, filed with the Department of Human Development and Family Sciences by May 1 for enrollment in the following spring semester, or by December 1 for enrollment in the following fall semester.

#### HDF 652F. Field Practicum: Community.

Designed for students in their last semester. Practicum in settings concerning human development and family sciences. One lecture hour and at least twenty laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upper-division standing; a University grade point average of at least 2.00; the following coursework with a grade of at least C- in each course: Human Development and Family Sciences 304 or 304H, 313 or 313H, 113L, 315L, and 340; Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302); Mathematics 408C, 408N, 408R, or Statistics and Data Sciences 332; and nine additional semester hours of upper-division coursework in human development and family sciences. Admission by application only, filed with the Department of Human Development and Family Sciences by May 1 for enrollment in the following spring semester, or by December 1 for enrollment in the following fall semester.

#### HDF 352L. Field Experience: Early Childhood.

Study and implementation of skills necessary for planning, guiding, and interacting with young children and their families, and for the management of facilities that provide services for young children. One lecture hour and ten to twelve hours of fieldwork a week for one semester. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: Upper-division standing; a University grade point average of at least 2.00; the following coursework with a grade of at least C- in each course: Human Development and Family Sciences 304 or 304H, 313 or 313H, 113L, and 315L, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302); Mathematics 408C, 408N, 408R, or Statistics and Data Sciences 332; Human Development and Family Sciences 338, 340, and 466; three additional semester hours of upper-division coursework in human development and family sciences; and consent of instructor. Admission by application only, filed with the Department of Human Development and Family Sciences by May 1 for enrollment in the following spring semester, or by December 1 for enrollment in the following fall semester.

#### HDF 652P. Field Practicum: Early Childhood.

Designed for students in their last semester. Study and implementation of skills necessary for planning, guiding, and interacting with young children and their families; and for the management of facilities that provide services for young children. One lecture hour and at least twenty laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Upper-division standing; a University grade point average of at least 2.00; the following coursework with a grade of at least C- in each course: Human Development and Family Sciences 304 or 304H, 313 or 313H, 113L, and 315L, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302); Mathematics 408C, 408N, 408R, or Statistics and Data Sciences 332; Human Development and Family Sciences 338, 340, and 466; three additional semester hours of upper-division coursework in human development and family sciences; and consent of instructor. Admission by application only, filed with the Department of Human Development and Family Sciences by May 1 for enrollment in the following spring semester, or by December 1 for enrollment in the following fall semester.

#### HDF 353. Longevity in the 21st Century.

Explores questions concerning the rapidly changing world in which people routinely live into old age. Focus on challenges adults face at the individual, familial, and societal level due to a prolonged adulthood. Three lecture hours a week for one semester. Human Development and Family Sciences 353 and 378K (Topic: Longevity in the 21st Century) may not both be counted. Prerequisite: Upper-division standing; and Human Development and Family Sciences 304 or 304H, and 315L with a grade of at least C- in each.

#### HDF 155H, 255H, 355H, 655H. Problems Course: Honors.

Intensive study of selected research problems. For each semester hour of credit earned, at least three laboratory hours a week for one semester. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: Upper-division standing; Human Development and Family Sciences 315L with a grade of at least B-; Mathematics 316, Statistics and Data Sciences 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), or 306 (or Statistics and Scientific Computation 306) with a grade of at least B-; a University grade-point average of at least 3.00; and consent of the department.

## HDF 155R, 255R, 355R, 655R. Problems Course: Research Practicum.

Intensive study of selected problems of a transdisciplinary nature. For each semester hour of credit earned, the equivalent of three lecture hours a week for one semester. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: Upper-division standing; a University grade point average of at least 2.00; the following coursework with a grade of at least C- in each course: Human Development and Family Sciences 304 or 304H, 313 or 313H, 113L, and 315L; Mathematics 408C, 408N, 408R, Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), or 332; and consent of instructor. Admission by application only, filed with the Department of Human Development and Family Sciences by May 1 for enrollment in the following spring semester, or by December 1 for enrollment in the following fall semester; or consent of instructor. For nonmajors, the application process and prerequisites may be waived by consent of instructor.

#### HDF 356. The Evolution of Relationships.

Reviews the scientific literature on the evolution and function of adult romantic relationships. Three lecture hours a week for one semester. Prerequisite: Human Development and Family Sciences 304 or 304H.

#### HDF 358. Parent-Child Relationships.

The determinants of parenting attitudes and behavior and the effects on children of variations in sensitivity, discipline, and other aspects of parenting. Three lecture hours a week for one semester. Prerequisite: Upper-division standing; and Human Development and Family Sciences 313, 113L, and 315L with a grade of at least C- in each.

#### HDF 360. Methods of Family Life Education.

An examination, integrating theory and applied knowledge, of the best practices for working with families. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and Human Development and Family Sciences 304 or 304H, and 315L with a grade of at least C- in each.

#### HDF 362. Children and Public Policy.

The positive and negative effects of policy on children and the policy landscape in several major domains of child and family life in the United States and in other countries. Three lecture hours a week for one semester. Prerequisite: Six semester hours of upper-division coursework in human development and family sciences, anthropology, education, psychology, sociology, or social work.

#### HDF 466. Guidance in Adult-Child Relationships.

Same as Women's and Gender Studies 466. Theory and implementation of positive child and adult interactions, communication, and guidance strategies. Two lecture hours and four laboratory hours a week for one semester. Only one of the following may be counted: Human Development and Family Sciences 466, Women's and Gender Studies 345 (Topic 4: Guidance in Adult-Child Relationships), 466. Prerequisite: Human Development and Family Sciences 313 or 313H, 113L, and three semester hours of upper-division coursework in human development and family sciences, education, psychology, or sociology, with a grade of at least C- in each.

#### HDF 371. Adolescent Development in Context.

The biological, cognitive, and social changes that occur during the second decade of life, including the developmental issues faced by adolescents. Three lecture hours a week for one semester. Prerequisite: Upper-division standing; and Human Development and Family Sciences 313 or 313H, 113L, and 315L, with a grade of at least C- in each.

#### HDF 372K. Families in Transition.

Analysis of interaction, transitions, and crises over the family life span. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and the following courses with a grade of at least C- in each: Human Development and Family Sciences 304 or 304H, and 315L and 337.

#### HDF 378K. Advanced Child and Family Development.

Concepts, theories, and issues in human development and family sciences. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Six semester hours of upperdivision coursework in human development and family sciences (or child development), anthropology, education, psychology, sociology, or social work, and consent of instructor.

#### Topic 5: Media and the Family.

#### Topic 6: Introduction to Early Childhood Intervention.

**Topic 8: Advanced Early Childhood Intervention.** Additional prerequisite: Human Development and Family Sciences 378K (Topic 6).

**Topic 9: Introduction to Child Life.** Introduction to the role of child life specialists in health care settings and the application of general human development principles to the care of hospitalized children and adolescents. Human Development and Family Sciences 378K (Topic: Introduction to Child Life) and 378K (Topic 9) may not both be counted.

**Topic 10: Sexuality in Human Development and Family Sciences.** Introduction to contemporary understandings of sexuality in the context of human development and families, organized around major subjects in the field of sexuality studies. Human Development and Family Sciences 378K (Topic: Sexuality in Human Development and Family Sciences) and 378K (Topic 10) may not both be counted.

#### HDF 378L. Theories of Child and Family Development.

Study and analysis of major theories in human and family development. Three lecture hours a week for one semester. Prerequisite: The following with a grade of at least C- in each: Human Development and Family Sciences 313 or 313H, 113L, 315L, and three additional semester hours of upper-division coursework in human development and family sciences.

#### HDF 379H. Honors Tutorial Course.

Supervised individual research on a special topic in human development and family sciences; oral presentation and preparation of a scholarly paper covering the research. May be based on laboratory, library, or field research. Conference course. May be repeated once for credit. Prerequisite: Upper-division standing, a University grade point average of at least 3.00, admission to the human development and family sciences honors program, and consent of the honors adviser. Name of honors adviser and application procedure are available in the division office.

### Human Ecology: H E

#### **Lower-Division Courses**

#### H E 115H. Freshman Honors Seminar.

Research presentations by students, faculty, and invited scientists on current issues in human ecology, human development and family sciences, and nutrition. One lecture hour a week for one semester. Prerequisite: Admission to the honors degree option in human development and family sciences or nutrition; three semester hours of honors-designated coursework in chemistry, biology, or mathematics with a grade of at least B-; and Human Development and Family Sciences 313 and 113L, or Nutrition 312 and 112L, with a grade of at least B- in each course.

#### **Upper-Division Courses**

#### H E 225H. Sophomore Honors Seminar.

Students plan, conduct, write, and present research on a current topic in human ecology. Two lecture hours a week for one semester. Prerequisite: Six semester hours of honors-designated coursework in chemistry, biology, or mathematics; concurrent enrollment in a course chosen from a list maintained in the departmental office; and consent of instructor and the departmental honors adviser.

#### H E 355. Problems Course.

Intensive study of selected problems of a transdisciplinary nature. The equivalent of three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Consent of instructor; additional prerequisites vary with the topic.

Topic 1: Research in Family Economics.

#### **Nutrition: NTR**

#### **Lower-Division Courses**

## NTR 306 (TCCN: BIOL 1322, HECO 1322). Fundamentals of Nutrition.

Essential food components and their functions in life processes. Three lecture hours a week for one semester. Only one of the following may be counted: Nutrition 306, 312, 312H. Nutrition 306 may not be counted toward a nutritional sciences degree.

#### NTR 307. Introductory Food Science.

Application of the principles of food chemistry to processing and preparation techniques. Three lecture hours a week for one semester.

Prerequisite: For nutrition majors: Nutrition 312 or 312H with a grade of at least C-, and credit or registration for 107L; for others: Nutrition 306, 312, or 312H with a grade of at least C-.

#### NTR 107L. Introductory Food Science Laboratory.

Three laboratory hours a week for one semester. Prerequisite: Credit or registration for Nutrition 307.

#### NTR 312. Introduction to Nutritional Sciences.

Biochemical, physiological, and cellular functions of energy macronutrients, vitamins and minerals, and the scientific basis for current dietary and nutrient recommendations. Designed for science majors. Three lecture hours a week for one semester. Only one of the following may be counted: Nutrition 306, 312, 312H. Prerequisite: Credit with a grade of at least a C- or registration for Nutrition 112L.

#### NTR 312H. Introduction to Nutritional Sciences: Honors.

Restricted to honors eligible majors in nutritional sciences, biology, biochemistry, and students in the Dean's Scholars Honors Program. Biochemical, molecular, and cellular functions of nutrients with emphasis on primary scientific literature and current methodology. Three lecture hours a week for one semester. Only one of the following may be counted: Nutrition 306, 311, 312, 312H. Prerequisite: The following coursework with a grade of at least C- in each: Chemistry 301 or 301H; and Mathematics 408C or 408n, or the equivalent; and credit or registration for Biology 311C or 315H, and Chemistry 302 or 302H.

#### NTR 112L. Introduction to Nutritional Science Laboratory.

Collection and evaluation of dietary intake data, nutrient composition of food, and survey of dietetic practice. Three laboratory hours a week for one semester. Prerequisite: Chemistry 301 with a grade of at least C-; credit or registration for Biology 311C, Chemistry 302, and Nutrition 312; and one of the following with a grade of at least C-: Mathematics 408C, 408D, 408N, Statistics and Data Sciences 302, 304, 306, 325H, 328M, (Statistics and Scientific Computation 302, 304, 306, 325H, 328M).

#### NTR 312R. Research in Nutritional Sciences.

Restricted to honors eligible majors in nutritional sciences, biology, biochemistry, and students in the Dean's Scholars Honors Program. Introduction to biochemical and molecular biological techniques, enzyme and coenzyme assays, dietary analysis and assessment protocols, and statistical methods in nutritional sciences. Preparation of a scholarly paper and oral presentation of research findings. One lecture hour and six laboratory hours a week for one semester. Nutrition 112L and 312R may not both be counted. Prerequisite: The following coursework with a grade of at least C- in each: Chemistry 301 or 301H; and Mathematics 408C or 408N, or the equivalent; and credit or registration for Biology 311C or 315H, Chemistry 302 or 302H, and Nutrition 312H.

#### NTR 315. Nutrition through the Life Cycle.

Adapting nutrition recommendations to physiological changes throughout the life span. Three lecture hours a week for one semester. Prerequisite: Nutrition 306, 312, or 312H with a grade of at least C-.

#### NTR 316. Culture and Food.

Influence of culture on foodways around the world. Three lecture hours a week for one semester. Prerequisite: Nutrition 306, 312, or 312H with a grade of at least C-.

#### NTR 218. Assessment of Nutritional Status.

Assessment of nutritional status using anthropometric, biochemical, clinical, and dietary intake data, and development and implementation of effective care for individuals. Two lecture hours a week for one semester.

Prerequisite: Nutrition 312 and 112L, or 312H and 312R with a grade of at least C- in each; and credit or registration for Nutrition 118L.

#### NTR 118L. Assessment of Nutritional Status Laboratory.

Three laboratory hours a week for one semester. Prerequisite: Credit or registration for Nutrition 218.

#### NTR 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Nutrition.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the School of Human Ecology. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### **Upper-Division Courses**

#### NTR 321. International Nutrition: The Developing World.

Nutrition-related issues in the developing world, including nutrient deficiency and disease, concerns in vulnerable populations (pregnancy, infancy, childhood, and old age), and food aid. Three lecture hours a week for one semester. Prerequisite: Nutrition 306, 312, or 312H with a grade of at least C-.

#### NTR 324. Advanced Food Science.

Application of the principles of food chemistry to the development of food products. Three lecture hours a week for one semester. Offered in the spring semester only. Prerequisite: Chemistry 320M, Nutrition 307, 107L, and 326 with a grade of at least C- in each; and credit or registration for Nutrition 124L.

#### NTR 124L. Advanced Food Science Laboratory.

Individual research project on food product development and evaluation. Three laboratory hours a week for one semester. Offered in the spring semester only. Prerequisite: Credit or registration for Nutrition 324.

#### NTR 326. Intermediate Nutrition and Metabolism.

Integration of nutrition, genetics, cell biology, and molecular biology. Focuses on the cellular and molecular basis of nutrition-related diseases and nutrient-gene interactions. Three lecture hours and one discussion hour a week for one semester. Prerequisite: The following coursework with a grade of at least C- in each course: Biology 311C, and Nutrition 312 or 312H; and credit or registration for Chemistry 320M, and Nutrition 112L or 312R.

#### NTR 126L. Nutritional Sciences Laboratory.

Basic laboratory techniques in nutritional sciences. Three laboratory hours a week for one semester. Prerequisite: Credit or registration for Nutrition 326.

#### NTR 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Nutrition.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the School of Human Ecology. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### NTR 330. Nutrition Education and Counseling.

Application of counseling and learning theories to the care of individuals and groups in community and clinical settings. Three lecture hours and

one additional class hour a week for one semester. Prerequisite: Nutrition 315 and 326 with a grade of at least C- in each.

## NTR 331. International Nutrition: Social and Environmental Policies.

Explores the nutritional concerns of different countries, environmental aspects of food supply, and social policies needed to balance supply with demand in a sustainable manner. Three lecture hours a week for one semester. Nutrition 331 and 360 (Topic: International Nutrition: Social and Environmental Policies) may not both be counted. Prerequisite: Upper-division standing, and Nutrition 306, 312, or 312H with a grade of at least C-.

#### NTR 332. Community Nutrition.

National and international issues in public health and nutrition programs. Three lecture hours a week for one semester. Prerequisite: The following coursework with a grade of at least C- in each course: Nutrition 312 or 312H; 315; and 326.

#### NTR 334. Foodservice Systems Management.

Procurement, production, and service delivery in foodservice systems. Three lecture hours a week for one semester. Prerequisite: For nutrition majors: Nutrition 307, 107L, and 326 with a grade of at least C- in each, and credit or registration for Nutrition 234L; for others: Nutrition 307 with a grade of at least C-, and one of the following with a grade of at least C-: Nutrition 306, 312, or 312H.

#### NTR 234L. Laboratory in Foodservice Systems.

Six laboratory hours a week for one semester. Prerequisite: Credit or registration for Nutrition 334.

#### NTR 337. Principles of Epidemiology in Nutritional Sciences.

Introduction the role of epidemiology methods as the basis for selection of study design and data collection tools in nutrition research such as dietary tools, biomarkers of diet or disease, and anthropometric measurements like obesity. Emphasis on interpretation of study results in nutrition research. Three lecture hours per week for one semester. Offered on the letter-grade basis only. Prerequisite: Credit with a grade of at least C- or registration for Nutrition 312H or 326, and one of the following with a grade of at least C-: Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 304 (or Statistics and Scientific Computation 304), 306 (or Statistics and Scientific Computation 306), 325H (or Statistics and Scientific Computation 325H), or 328M (or Statistics and Scientific Computation 328M).

#### NTR 338H. Issues in Nutrition and Health: Honors.

Restricted to honors majors in biology, biochemistry, and nutritional sciences, and students in the Dean's Scholars honors program. Identifying, reading, analyzing, writing, and presenting scientific research on selected subjects in nutrition and human health. Detailed literature review as preparation for an honors research thesis. Three lecture hours a week for one semester. Nutrition 338H and 338W may not both be counted. Prerequisite: Biology 325 or 325H; Nutrition 312H and 312R; one of the following: Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 303 (or Statistics and Scientific Computation 303), 304 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 325H); and credit or registration for Biology 365S and Chemistry 369, or Chemistry 339K and 339L.

#### NTR 338W. Issues in Nutrition and Health.

Identifying, reading, analyzing, writing, and presenting scientific research on selected topics in nutrition and human health. Three lecture hours a week for one semester. Nutrition 338H and 338W may not both be counted. Prerequisite: The following with a grade of at least C-: Biochemistry 369 (or Chemistry 369), or Biochemistry 339F (or Chemistry 339K and 339L); Biology 325 and 365S (or 416L); Nutrition 312H or 326; and one of the following with a grade of at least C-: Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 304 (or Statistics and Scientific Computation 304), 306 (or Statistics and Scientific Computation 306), 325H (or Statistics and Scientific Computation 325H), or 328M (or Statistics and Scientific Computation 328M).

#### NTR 342. Advanced Nutritional Sciences.

Biochemical and molecular biological aspects of carbohydrate, fat, and amino acid metabolism. Three lecture hours and one discussion hour a week for one semester. Prerequisite: The following coursework with a grade of at least C-: Nutrition 326; and Biology 325 or Nutrition 218 and 118L; and credit with a grade of at least C- or registration for Biochemistry 369 (or Chemistry 369) and Biology 365S.

#### NTR 343. Vitamins and Minerals.

Biomedical, cellular and molecular, and clinical aspects of vitamins, minerals, and water. Three lecture hours a week for one semester. Only one of the following may be counted: Nutrition 343, 344, 365 (Topic 1). Prerequisite: Biology 325, 365S, and Nutrition 342, with a grade of at least C- in each.

#### NTR 144M. Advanced Nutrition II Laboratory.

Advanced laboratory techniques in nutrition assessment and research. Three laboratory hours a week for one semester. Offered in the spring semester only. Prerequisite: Consent of instructor.

#### NTR 245C. Clinical Practice in Medical Nutrition Therapy I.

Application of principles of medical nutrition therapy to the care of clients in the practice setting. Nine hours of supervised practice a week for one semester. Prerequisite: Nutrition 370 with a grade of at least C-, credit or registration for Nutrition 371, and admission to the Coordinated Program in Dietetics.

#### NTR 345M. Clinical Practice in Medical Nutrition Therapy II.

Application of principles of medical nutrition therapy to the care of patients in health care facilities. Forty hours of supervised practice a week for four weeks. Prerequisite: Nutrition 245C and 371 with a grade of at least C- in each. Students must register for Nutrition 372C in the same semester.

#### NTR 152, 252, 352. Field Experience in Nutrition.

For each semester hour of credit earned, three field placement hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Approval of application for field experience. Applications are available in the department office.

#### NTR 353. Field Experience in International Nutrition.

Supervised study abroad experience designed to help students understand nutrition science issues, applications, related health care practices in a global environment, and other cultures. Students work in schools, hospitals, or similar settings to gain professional experience with food science and dietetics. Five lecture hours and ten field hours a week for five weeks. Prerequisite: Nutrition 306, 312, or 312H with a grade of at least C-; and approval of an application to study abroad.

#### NTR 155, 255, 355, 455. Undergraduate Research in Nutrition.

Supervised individual undergraduate research in nutrition. For each semester hour of credit earned, at least three laboratory hours a week for one semester. May be repeated for credit, but no more than four semester hours may be counted toward a degree in nutrition. Any additional hours must be taken on the pass/fail basis. Nutrition 355 and 355H may not both be counted. Prerequisite: Consent of instructor.

#### NTR 355H. Honors Research.

Restricted to honors eligible majors in nutritional sciences, biology, biochemistry, and students in the Dean's Scholars Honors Program. Research in biological, biochemical, or nutritional science, coordinated with readings of scientific literature, and a written research report for each semester in which credit is sought. Nutrition 355 and 355H may not both be counted. May be repeated for credit, but no more than nine semester hours may be counted toward the major in nutrition. Any additional hours must be taken on the pass/fail basis. Prerequisite: Biology 325 or 325H; Nutrition 312H and 312R; and approval of research supervisor.

#### NTR 355M. Advanced Food Systems Management.

Financial control, quality assurance, personnel administration, foodservice equipment, layout and design in foodservice operations. Analysis and evaluation of an organized foodservice operation. Three lecture hours and four hours of supervised practice a week for one semester. Prerequisite: Accounting 310F or 311, and Nutrition 334 and 234L, with a grade of at least C- in each.

#### NTR 360. Selected Topics in Applied Nutrition.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

## NTR 162. Standards, Ethics, and Credentialing for Dietetic Practice.

Identification of standards and discussion of current issues in ethics and credentialing for dietetics practice. One lecture hour a week for one semester. Prerequisite: Credit or registration for Nutrition 218 and 118L.

#### NTR 365. Selected Topics in Nutritional Sciences.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 2: Nutrition and Genes.** Interactions between nutrients and gene expression, including heredity, gene regulation, metabolic disease, developmental abnormalities, and molecular techniques. Additional prerequisite: Biology 325, 365S, and Nutrition 342, with a grade of at least C- in each.

**Topic 4: Obesity and Metabolic Health.** Examines the prevalence, prevention, and treatment of adult and childhood obesity, and the metabolic disorders related to obesity. Prerequisite: Biology 365S, and Nutrition 312 or 312H with a grade of at least C-.

#### NTR 366L. Research Methods in Nutritional Sciences.

Focuses on state-of-the-art research in nutrition, including biochemistry and molecular biological techniques for nutrient-gene interactions, enzyme and coenzyme functions, and nutrient analysis of biologic materials. Includes data analysis and statistical methods. One lecture hour and six laboratory hours a week for one semester. Prerequisite: Nutrition 126L with a grade of at least C-.

#### NTR 167. Undergraduate Seminar in Nutritional Sciences.

One lecture hour a week for one semester. Prerequisite: Upper-division standing.

#### NTR 370. Medical Nutrition Therapy I.

The role of nutrition in prevention and treatment of chronic disease such as diabetes and heart disease. Three lecture hours a week for one semester. Prerequisite: Nutrition 326 with a grade of at least a C-; and credit with a grade of at least C- or registration for the following: Biology 365S, Biochemistry 369 (or credit for Chemistry 369), and Nutrition 218 and 118L.

#### NTR 371. Medical Nutrition Therapy II.

Nutritional care of critically ill patients, including techniques of nutrition support. Three lecture hours a week for one semester. Prerequisite: Nutrition 326 with a grade of at least a C-; and credit with a grade of at least C- or registration for the following: Biology 365S, Biochemistry 369 (or credit for Chemistry 369), and Nutrition 218 and 118L.

#### NTR 372C. Practicum in Clinical Dietetics.

Supervised practice in health care facilities. Forty hours of supervised practice a week for four weeks. Prerequisite: Admission to the Coordinated Program in Dietetics. Students must register for Nutrition 345M in the same semester.

## NTR 372F. Practicum in Food Services Systems Management.

Supervised practice in food service facilities. Forty hours of supervised practice a week for four weeks. Prerequisite: Nutrition 245C and 355M with a grade of at least C- in each, and admission to the Coordinated Program in Dietetics. Students must register for Nutrition 373S in the same semester.

#### NTR 373S. Practicum in Dietetic Administration.

Supervised practice in the administration of food and nutrition programs. Forty hours of supervised practice a week for three weeks. Prerequisite: Admission to the Coordinated Program in Dietetics. Students must register for Nutrition 372F in the same semester.

#### NTR 374C. Practicum in Community Dietetics.

Supervised practice in one or more community-based nutrition programs. Forty hours of supervised practice a week for five weeks. Prerequisite: Nutrition 345M, 372C, 372F, and 373S with a grade of at least C- in each; and admission to the Coordinated Program in Dietetics.

#### NTR 374P. Advanced Practicum in Dietetics.

Culminating experience in the practice of administrative, clinical, or community dietetics. Forty hours of supervised practice a week for five weeks. Prerequisite: Nutrition 345M, 372C, 372F, and 373S with a grade of at least C- in each; and admission to the Coordinated Program in Dietetics.

#### NTR 379H. Honors Tutorial Course.

Supervised individual research on a special topic in nutrition; oral presentation and preparation of a scholarly paper covering the research. May be based on laboratory, library, or field research. Conference course. May be taken twice for credit. May be repeated for credit. Prerequisite: Consent of the student's research supervisor and the departmental honors adviser.

### **Public Health: PBH**

#### **Lower-Division Courses**

#### PBH 317. Introduction to Public Health.

Overview and basic principles of public health, including the public health system, concepts and tools for measuring health in populations, the relationship between public health and the medical care system, and the role of law and government in public health. Three lecture hours a week for one semester. Biology 317 and Public Health 317 may not both be counted.

#### **Upper-Division Courses**

## PBH 320. Topics in Health Informatics and Health Information Technology.

Concepts, theories, and issues in health informatics and health information technology. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Biology 325 or 325H with a grade of C-.

Topic 1: Introduction to Health Informatics and Healthcare Analytics.

Restricted to students enrolled in the Health Informatics and Health Information Technology Professional Education Program. Consists of didactic lectures about the theoretical foundations of health informatics, database theory and management, healthcare standards, medical decision making, and healthcare analytics. Includes four hands-on workshops that relate to subjects taught in this course: HL7, SQL, Microsoft Excel, Microsoft Access, and Tableau. Also includes a research project over a six-eight week time period, production of a professional poster, and a presentation in a research poster forum judged by faculty, industry representatives, healthcare professionals, and policy makers.

**Topic 2: Fundamentals of Health Information Technology.** Restricted to students enrolled in the Health Informatics and Health Information Technology Professional Education Program. Explores healthcare policy (including privacy and security), current technologies (telemedicine, hospital information systems and computer and networking technologies) and the interoperable exchange of healthcare data.

Topic 3: Project Management, Process Redesign and Quality Improvement. Restricted to students enrolled in the Health Informatics and Health Information Technology Professional Education Program. Explores the basics of project management, including requests for proposals, scope, project planning, budgets and deliverables. Also discussed is an analysis of workflow processes and the impact of technology to improve these processes. Quality improvement, including tools to improve guality, is also presented. Includes several individual assignments and one team project. Topic 4: Operational Models of Healthcare Systems. Restricted to students enrolled in the Health Informatics and Health Information Technology Professional Education Program. Explores the complex United States (US) health care system and explains the manner by which health care is delivered along a continuum of care. A special emphasis is placed on the operational delivery of ambulatory care and the manner in which acute care facilitates are evolving. Subjects include a comparison of the US health care system to health care delivery in other countries, population health and health care finance/ insurance - including discussion on public (Medicare and Medicaid) and private (Managed Care) coverage. Descriptions of current and emerging payment mechanisms, revenue cycle management, risk management, overhead reduction and practice management are covered in detail to allow students a robust understanding of business issues associated with health care delivery.

Topic 5: Technology Competencies in Health Informatics and Health Information Technology. Restricted to students enrolled in the Health Informatics and Health Information Technology Professional Education Program. Hands-on laboratory, team-taught by program faculty and staff with support from industry partners. Utilization of multiple health informatics and health information technology systems, health information exchange and interoperability software, and key analytics tools. This laboratory builds upon concepts taught in Public Health 320, Topic 1 and Public Health 320, Topic 2. Topic 6: Practicum and Professional Development in Health Informatics and Health IT. Restricted to students enrolled in the Health Informatics and Health Information Technology Professional Education Program. Professional development lectures, activities, and a ten-day practicum experience off campus to experience working with industry, healthcare systems, policy makers, and other experts in the field.

#### PBH 323. Introduction to Health Informatics.

Introduces theoretical foundations of health informatics, database theory and management, healthcare standards, and medical decision making. Only one of the following may be counted: Biology 337 (Topic: Introduction to Health Informatics), 353, Public Health 323.

#### PBH 330. Topics in Public Health.

Concepts, theories, and issues in public health. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Biology 325 or 325H with a grade of at least C-.

#### PBH 334. Global Health.

An investigation of global health issues, including the principles of global health, the burden of morbidity and mortality, health determinants, health care and public health systems, socioeconomic development, and human rights. Three lecture hours a week for one semester. Biology 334 and Public Health 334 may not both be counted. Prerequisite: Public Health 358D and 368D with a grade of at least C- in each.

#### PBH 137, 237, 337, 437. Selected Topics in Public Health.

Recent developments and research methods in the field of public health will be explored. For each semester hour of credit earned, one lecture hour a week for one semester. Some topics may require additional hours. May be repeated for credit when the topics vary. Prerequisite: Bio 325 or 325H with a grade of at least C-.

#### PBH 338. Environmental Health.

Introduction to the major areas of environmental health presented in the context of epidemiology, toxicology, and health effects. Subjects include water and air quality, solid and liquid waste, hazardous chemicals, radiation, infectious agents, food safety, and occupational health. Three lecture hours a week for one semester; several field trips to be arranged outside of the lecture. Prerequisite: Public Health 358D and 368D with a grade of at least C- in each.

#### PBH 341R. Public Health Research.

Students conduct public health research, mentored by professionals at public health practice agencies or faculty at graduate schools of public health throughout Texas. An average of twelve hours of fieldwork a week for a total of at least 180 hours. May be repeated for credit. Prerequisite: Biology 325 or 325H with a grade of at least C-; students must also submit a proposal to the instructor.

#### PBH 354. Epidemiology.

Restricted to public health majors. Introduction to basic principles and concepts in epidemiology, including descriptive epidemiology, association and causation, basic epidemiological study design, evidencebased decision analysis, and applications of epidemiology methods to basic and clinical science. Three lecture hours a week for one semester. Prerequisite: Public Health 317 with a grade of at least C-; and credit or registration for Biology 325 or 325H, and Statistics and Data Sciences 328M (or credit for Statistics and Scientific Computation 328M).

#### PBH 356. Health Behavior Theory and Practice.

Restricted to public health majors. An introduction to social and behavioral theories that inform the discipline of public health and applied public health practice, including practical examples of how these theories inform and influence health promotion to understand and modify health-related behaviors. Focus on health inequities and inequalities of populations living in the United States and how underlying cultures and social structures impact the health of individuals and communities. Three lecture hours a week for one semester. Only one of the following may be counted: Public Health 356, 368D, or Sociology 368D. Prerequisite: The following coursework with a grade of at least Cin each: Public Health 354, Biology 325, Statistics and Data Sciences 328M.

#### PBH 358D. Health Policy and Health Systems.

Covers the essentials of health policy and law, including the ways that policy and legal issues impact health care and public health systems. Three lecture hours a week for one semester. Only one of the following may be counted: Health and Society 330, Public Health 358D, Sociology 358D. Prerequisite: The following coursework with a grade of at least C-in each: Public Health 354, and Statistics and Data Sciences 328M (or Statistics and Scientific Computation 328M).

#### PBH 361P. Public Health Internship.

Includes a public health research project off campus at a public health practice agency or a graduate school of public health. The equivalent of twelve lecture hours a week for one semester, with additional hours to be arranged. May be repeated once for credit. May be repeated for credit. Offered on the letter-grade basis only. Prerequisite: Biology 325 or 325H and Statistics and Data Sciences 328M (or Statistics and Scientific Computation 328M) with a grade of at least C- in each; and completion and approval of an internship application, available online at the Public Health website.

#### PBH 379H. Honors Tutorial Course.

Supervised individual research on a special topic in public health, leading to an honors thesis and an oral presentation. May be based on laboratory, library, or field research. Three lecture hours a week for one semester. May be repeated once for credit. May be repeated for credit. Prerequisite: Upper-division standing; a university grade point average of at least 3.0; admission to the public health honors program; and consent of the honors adviser.

### **Textiles and Apparel: TXA**

#### **Lower-Division Courses**

#### TXA 301. Clothing the Planet.

Study of the role textiles and apparel play in human lives. Introduction to the textile and apparel industries, and the broad perspective and core skill sets that characterize the field. Subjects include terminology, fibers and fabrics, textile technology, product development through fashion design and retail merchandising, global sourcing and manufacturing, international promotion and marketing, and textile conservation, exhibition, and collection management. Three lecture hours a week for one semester.

#### TXA 103, 203, 303. Topics in Textiles and Apparel.

For each semester hour of credit earned, the equivalent of one hour a week for one semester. May be repeated for credit when the topics vary.

#### TXA 205. Textiles.

Chemical and physical properties of fibers and yarns, fabric construction, and finishes. Two lecture hours a week for one semester. Prerequisite: Credit or registration for Textiles and Apparel 105L.

#### TXA 105L. Textiles Laboratory.

Three laboratory hours a week for one semester. Prerequisite: Credit or registration for Textiles and Apparel 205.

#### TXA 212K. Apparel Industry.

Introduction to the integrated apparel design industry from the creative and merchandising perspective. Two lecture hours a week for one semester. Prerequisite: Credit with a grade of at least C- or registration for Textiles and Apparel 212L; and the following coursework with a grade of at least C- in each course: Textiles and Apparel 316L or 316Q; and 319, or 219C and 119L.

## TXA 212L. Apparel Product Development and Design Laboratory.

Six laboratory hours a week for one semester. Prerequisite: Credit or registration for Textiles and Apparel 212K.

#### TXA 313. Aesthetics: Theory and Practice.

Introduction to the theoretical and practical aspects of the principles of design and visual literacy in the field of textiles and apparel. Introduction to the principles and theories that define what is aesthetically pleasing and the vocabulary necessary to identity, describe, and critique them. Three lecture hours a week for one semester.

#### TXA 214K. Product Development.

Introduction to all stages of product development involved in fashion and functional design. Emphasis on target market identification, cost analysis, material selection, and the organization of product development within the industry structure. Two lecture hours a week for one semester. Prerequisite: Concurrent registration for Textiles and Apparel 214L.

#### TXA 214L. Product Development Laboratory.

Application of product development skills and strategies involved in fashion and functional design. Emphasis on target market identification, cost analysis, material selection, and the position of product development within the industry structure. Six laboratory hours a week for one semester. Prerequisite: Concurrent registration for Textiles and Apparel 214K.

#### TXA 316L. Apparel I.

Industrial techniques of pattern design and garment construction. One lecture hour and six laboratory hours a week for one semester.

#### TXA 316Q. Sewn Products Analysis.

Evaluation of soft goods, including materials, quality of work, and costs. Three lecture hours a week for one semester. Prerequisite: Credit with a grade of at least C- or registration in Textiles and Apparel 205 and 105L.

#### TXA 219C. Applied Art in Visual Presentation.

Applied principles and elements of design as related to merchandise presentation, visual display, store layout, and space planning. Two lecture hours a week for one semester. Students with credit for Textiles and Apparel 319 may not earn credit for Textiles and Apparel 219C or 119L. Prerequisite: Textiles and Apparel 313 with a grade of at least C-.

#### TXA 119L. Applied Art in Visual Presentation Laboratory.

Application of the principles and elements of design as related to merchandise presentation, display planning, execution, and coordination. Three laboratory hours a week for one semester. Students with credit for Textiles and Apparel 319 may not earn credit for Textiles and Apparel 119L. Prerequisite: Credit with a grade of at least C- or registration for Textiles and Apparel 219C.

#### TXA 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Textiles and Apparel.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the School of Human Ecology. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### **Upper-Division Courses**

#### TXA 325K. Culture, Gender, and Appearance.

Social, economic, aesthetic, and political aspects of historic costume and of the evolution of modern dress. Three lecture hours a week for one semester. Prerequisite: Textiles and Apparel 219C and 119L with a grade of at least C- in each, or Art History 301.

#### TXA 325L. History of Dress and Cultural Change I.

Social, economic, aesthetic, and political aspects of costume evolution from ancient times through the Renaissance. Three lecture hours a week for one semester. Textiles and Apparel 325K and 325L may not both be counted. Prerequisite: Upper-division standing.

#### TXA 325M. History of Dress and Cultural Change II.

Social, economic, aesthetic, and political aspects of costume evolution from the Baroque period through modern times. Three lecture hours a week for one semester. Textiles and Apparel 325K and 325M may not both be counted. Prerequisite: Upper-division standing.

#### TXA 126. Apparel II.

Advanced apparel construction techniques using industry standards and portfolio development. One lecture hour a week for one semester. Prerequisite: Textiles and Apparel 316L with a grade of at least C- and credit or registration for Textiles and Apparel 226L.

#### TXA 226L. Apparel II Laboratory.

Advanced apparel construction techniques using industry standards and portfolio development. Six laboratory hours a week for one semester. Prerequisite: Credit or registration for Textiles and Apparel 126.

#### TXA 327. Clothing and Human Behavior.

The social, psychological, and nonverbal significance of clothing and the influence of clothing on behavior. Three lecture hours a week for one semester. Prerequisite: Three semester hours of coursework in psychology, sociology, or the School of Human Ecology.

#### TXA 328. Research Methods in Textiles and Apparel.

Basic research methodology and academic writing. Three lecture hours a week for one semester. Prerequisite: Upper-division standing, completion of an introductory statistics course, and Textiles and Apparel 205 and 105L with a grade of at least C- in each.

#### TXA 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Textiles and Apparel.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the School of Human Ecology. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### TXA 331. Textiles and Apparel in a Global Market.

Overview of the textiles and apparel industry including apparel industry standards, labor costs, economics, distribution, and structure in the modern global marketplace. Subjects include the analysis of consumption patterns and retailing systems to inform product development; exploring cross-cultural comparisons between global consumer markets; understanding importing and exporting systems and other procedures involved in modern supply chain activities; and grasping the collaborative nature of innovation and design, manufacturing and distribution, retailing, and customer satisfaction leading to sales in the global market. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### TXA 350. Advanced Apparel Design Portfolio.

Extensive sociological, cultural, and historic visual research for apparel design. Through a range of projects that incorporate computer-aided design, product illustration, technical packets, proposed production plans, and target market identification, students will produce a professional level, hard copy and online, portfolio that will help prepare them for a career in the apparel industry. The equivalent of three lecture hours a week for one semester. Prerequisite: Upper-division standing; Textiles and Apparel 164K (Topic 1) and 264L (Topic 1); and admission to the Apparel Design Internship Program.

#### TXA 151. Pre-Internship Seminar.

Preparation course for students seeking internships. Subjects include application, internship interview process, effective professional communication, ethical decision making, leadership development, site expectations, and the impact of business environments on personal and career effectiveness in the field of textiles and apparel. One lecture hour a week for one semester. Prerequisite: Upper-division standing, Textiles and Apparel 301, 205, 105L, 214K, 214L, 316Q, 219C, 119L, and 376.

#### TXA 352C, 652C. Field Experience in Textile Conservation.

Participation in an approved internship after completion of all conservation science stream coursework. Students will be placed in an appropriate site under the supervision of an available professional such that students may experience collection management, artifact storage and conservation, exhibit planning/installation, environmental monitoring, and/or other museum or conservation activities. A formal agreement between the faculty supervisor and internship sponsor will govern activities and be monitored throughout the experience through assignments, regular electronic communication, and a site visit. For Textiles and Apparel 352C, a minimum of 150 hours of supervised fieldwork for one semester. For Textiles and Apparel 652C, a minimum of 225 hours of supervised fieldwork for one semester. Prerequisite: Upper-division standing; and Admission to the Conservation Certificate Program, or Textiles and Apparel 219C, 119L, 354C, 354D, 354E, 354F, and 355D, and admission to the Conservation Internship Program for Conservation Science, Option IV major.

#### TXA 352D. Field Experience in Apparel Design.

Application of apparel design techniques and principles in a professional environment. At least 154 hours of fieldwork for one semester. Prerequisite: Admission to the Apparel Design Internship Program, and Textiles and Apparel 164K (Topic 1: Flat Pattern) and 264L (Topic 1: Flat Pattern) with a grade of at least C- in each.

#### TXA 352M. Field Experience in Retail Merchandising.

Application of merchandising techniques and principles in a professional environment. At least 154 hours of supervised fieldwork for one semester. Prerequisite: Admission to the Retail Merchandising Internship Program.

#### TXA 353. Field Experience I.

Application of merchandising strategic planning in a professional environment with faculty and site director supervision. At least 150 hours of supervised fieldwork for one semester. Textiles and Apparel 315K and Textiles and Apparel 353 may not both be counted. Prerequisite: Admission to the Retail Merchandising Internship Program.

#### TXA 354C. Material Properties and Deterioration.

Overview of the major mechanisms of textile deterioration from a variety of sources including light, dirt, various insects and microorganisms, as well as mechanical wear and tear. Examination of the peculiarities of these deterioration phenomena through the study of the basic chemical and physical properties of the fibers constituting the textiles. Three lecture hours a week for one semester. Prerequisite: Textiles and Apparel 354E with a grade of C- or better.

## TXA 354D. Instrumental Methods for Conservation Assessment.

Overview of primary instrumental methods for evaluating historical textiles in terms of physical characteristics, chemical content, strength loss, structural deterioration, color change, and overall structural integrity and status of impact of environmental factors. Focus on instrumental features, measuring procedures, and interpretation of instrumental data. Three lecture hours a week for one semester. Prerequisite: Textiles and Apparel 354E with a grade of at least C-.

## TXA 354E. Conservation Planning and Preventive Treatments.

Implementation and management of textile conservation. Subjects include general requirements for preserving historical textiles, procedures for planning textile conservation projects, and major physical and chemical methods of preventive and postdamage treatments for historical textiles. One lecture hour and four laboratory hours a week for one semester. Prerequisite: The following with a grade of at least C-: Chemistry 320M, Textiles and Apparel 260L, and 260M.

#### TXA 354F. Advanced Exhibit Planning and Installation.

Planning and implementation of a full museum exhibit including budget, selection and preparation of artifacts, prop construction, signage, educational and promotional materials, donor/supporter communication, and opening event. Serves as a pre-internship/capstone course for conservation science majors. Six laboratory hours a week for one semester. Prerequisite: Textiles and Apparel 325L, 325M, and 355D.

#### TXA 155, 355. Problems Course.

Intensive study of selected problems of an interdisciplinary nature. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Consent of instructor.

#### TXA 355C. Computer-Aided Design for Apparel.

Computer technology used to create textile prints, weaves, illustrations, flat patterns, promotional pieces, and pattern markers. One lecture hour and six laboratory hours a week for one semester. Prerequisite: Textiles and Apparel 205 and 105L with a grade of at least C- in each; and credit with a grade of at least C- or registration for Textiles and Apparel 164K (Topic 1: Flat Pattern) and 264L (Topic 1: Flat Pattern).

#### TXA 355D. Textiles Artifact Management and Conservation.

Principles and techniques in the identification, documentation, conservation, and exhibition of textile-based artifacts. Six laboratory hours a week for one semester. Prerequisite: Textiles and Apparel 325M.

#### TXA 355K. Textile and Apparel Economics.

Economic and regulatory aspects of the textile and apparel industries. Three lecture hours a week for one semester. Prerequisite: Textiles and Apparel 205 and 105L with a grade of at least C- in each, and Economics 304K and 304L with a grade of at least C- in each.

#### TXA 355N. History of Textiles.

Role of textiles in the social, economic, aesthetic, and technological development of society; including production and design of textiles throughout history. Three lecture hours a week for one semester. Prerequisite: Textiles and Apparel 205 and 105L and three semester hours of coursework in art history, with a grade of at least C- in each course.

#### TXA 355P. Problems in Retail Merchandising.

Intensive study of selected problems related to field experience; development of analytical and problem-solving skills for retailing. At least 154 hours of supervised fieldwork for one semester. Prerequisite: Admission to the Retail Merchandising Internship Program.

#### TXA 359H. Honors Reading Course.

Supervised individual reading on special subjects. Conference course. Prerequisite: Upper-division standing, a University grade point average of at least 3.00, and consent of the undergraduate adviser.

#### TXA 260L. Advanced Textiles.

Composition, structure, and properties of textile products; contributions of textile research. Two lecture hours a week for one semester. Prerequisite: Textiles and Apparel 205 and 105L; Chemistry 301, 302, and 204; six semester hours of upper-division coursework in textiles and apparel with a grade of at least C- in each course; and credit with a grade of at least C- or registration for Textiles and Apparel 260M.

#### TXA 260M. Advanced Textiles Laboratory.

Analysis and evaluation of textile performance. Six laboratory hours a week for one semester. Prerequisite: Credit or registration for Textiles and Apparel 260L.

#### TXA 361. Consumer Behavior in the Marketplace.

Internal and external factors that influence consumer behavior in the marketplace. Application of concepts and theories from the social sciences to the areas of textiles, clothing, and appearance; experience in conducting market and consumer research. Three lecture hours a week for one semester. Prerequisite: Upper-division standing and three semester hours of coursework in economics.

#### TXA 164K. Advanced Problems in Clothing.

Creative application of flat pattern or draping processes. One lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Textiles and Apparel 212K, 212L, 316L, 126, and 226L, with a grade of at least C- in each; and credit with a grade of at least C- or registration for the same topic of Textiles and Apparel 264L.

Topic 1: Flat Pattern. Topic 2: Draping. Topic 3: Advanced Apparel Design.

#### TXA 264L. Advanced Problems in Apparel Laboratory.

Six laboratory hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Credit with a grade of at least C- or registration for the same topic of Textiles and Apparel 164K.

Topic 1: Flat Pattern. Topic 2: Draping. Topic 3: Advanced Apparel Design.

#### TXA 165, 265, 365. Advanced Topics in Textiles and Apparel.

For each semester hour of credit earned, one lecture hour a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing. Additional prerequisites vary with the topic.

#### TXA 376. Principles of Retail Merchandising.

Retail strategic planning and implementation for soft goods and apparel. Three lecture hours a week for one semester. Prerequisite: Marketing 320F and six semester hours of upper-division coursework in textiles and apparel, business, studio art, or journalism.

#### TXA 377. Merchandising Systems.

Application course focusing on the calculation and analysis of the selling price, profitability, assortment planning, purchasing, and inventory control. Includes spreadsheet application and exercises. Prerequisite: Upper-division standing; Textiles and Apparel 301, 205, 105L, 214K, 214L, 316Q, 219C, 119L, 151, and 376; and admission to the Retail Merchandising Internship Program.

#### TXA 378H. Honors Seminar in Textiles and Apparel.

The equivalent of three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing, a University grade point average of at least 3.00, and consent of the honors adviser.

#### TXA 379H. Honors Tutorial Course.

Supervised individual research on a special topic in textiles and apparel; oral presentation and preparation of a scholarly paper covering the research. May be based on laboratory, library, or field research. Conference course. May be taken twice for credit. May be repeated for credit. Prerequisite: Upper-division standing, admission to the Textiles and Apparel Honors Program, Textiles and Apparel 359H with a grade of at least B-, and consent of the honors adviser.

## **Department of Marine Science**

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

### Marine Science: MNS

#### **Lower-Division Courses**

#### MNS 101. Seminar in Marine Science.

Overview of the depth and breadth of marine and freshwater science. Introduction to research opportunities at the university. One lecture hour a week for one semester. Biology 101C (Topic: Seminar in Marine Science) and Marine Science 101 may not both be counted. Prerequisite: None

#### MNS 307 (TCCN: GEOL 1345). Introduction to Oceanography.

Introduction to the sciences of oceanography: geological, physical, and biological. Two lecture hours and two laboratory hours a week for one semester. Marine Science 307 and Geological Sciences 307 may not both be counted.

#### MNS 308. Humans and a Changing Ocean.

The consequences of human-induced alteration of the marine environment including the impact on fisheries, marine mammals, foodweb changes, and changes in species composition and ecological function will be explored. Designed for non-science majors. Two lecture hours and two laboratory hours a week for one semester. Marine Science 309 (Topic: Humans and a Changing Ocean) and 308 may not both be counted. Prerequisite: Marine Science 307 (or Geological Sciences 307).

#### MNS 309. Topics in Marine Science.

Designed for nonscience majors. Selected topics in marine science, including marine biology, marine chemistry, and physical oceanography. Two lecture hours and one and one-half laboratory hours a week for one semester. May not be counted toward a degree in marine science. May be repeated for credit when the topics vary. Prerequisite: Marine Science 307.

#### MNS 310. Fundamentals of Marine Science.

Designed for students pursuing a degree option in Marine and Freshwater Science. In-depth introduction to physical, chemical, geological, and biological processes in marine systems. Three lecture hours a week for one semester. Prerequisite: The following with a grade of at least a C- in each: Biology 311D or 315H, or 301L and 301M; and Chemistry 302 or 302H, or Chemistry 304K and 305.

#### **Upper-Division Courses**

#### MNS 320. Marine Ecology.

Study of ecological processes at different levels of integration in marine ecosystems. Three lecture hours a week for one semester. Prerequisite: Biology 311D, and Chemistry 302 or 302H.

#### MNS 120L. Laboratory Studies in Marine Ecology.

A laboratory course with two weekend field trips to the Marine Science Institute at Port Aransas to perform ecological studies in the Texas coastal zone. Two weekend field trips, with pre- and post-field trip laboratory hours required. Prerequisite: Credit or registration for Marine Science 320.

#### MNS 440. Limnology and Oceanography.

Same as Biology 456L. An introduction to the study of the interactions between aquatic organisms and their environments. Two lecture hours and six laboratory hours a week for one semester. Prerequisite: Chemistry 302 or 302H; and the following with a grade of at least C-: Biology 325 or 325H, and Biology 206L, 208L, 226L, or Environmental Science 311.

#### MNS 344K. Marine Mining and Minerals.

Same as Geological Sciences 344K. Overview of seafloor mineral deposits, their exploration, and mining. Three lecture hours a week for one semester. May not be counted toward the Bachelor of Science in Geological Sciences or the Bachelor of Science in Environmental Sciences degrees. Prerequisite: Geological Sciences 401 or 303, 416K, and 416M.

#### MNS 148, 348. Training Cruise(s).

May be repeated for credit when the topics vary.

**Topic 1: Training Cruise(s): Research in Biological Oceanography.** One or more cruises of one to several days each to collect physical, chemical, oceanographic, and biological data relevant to biological processes in the sea. Preparatory instruction and post-cruise sample processing and analysis. Marine Science 148, 348 (Topic 1) and 152R may not both be counted. Additional prerequisite: The following with a grade of at least C- in each: Biology 311D or 315H, and Chemistry 302 or 302H.

Topic 2: Marine Geology and Geophysics Field Course. Hands-on, team-based instruction in the collection and processing of marine geological and geophysical data along the Gulf of Mexico coast. For Marine Science 148, one lecture hour and one laboratory hour a week for one semester. For Geological Sciences 348K and Marine Science 348, one lecture hour and four laboratory hours a week for one semester with additional hours to be arranged. Only one of the following may be counted: Geological Sciences 348K, 397F, Marine Science 348 (Topic 2). Fulfills the field experience requirement for some geological sciences degree programs. Students should contact the Department of Geological Sciences before registering. Additional prerequisite: For geological sciences majors, Geological Sciences 420K or 320L with a grade of at least C-, and consent of instructor; Geological Sciences 416M and 465K are recommended; for others, Marine Science 307 and 354F with a grade of at least C- in each, and consent of instructor.

#### MNS 352. Principles of Marine Science.

Lectures, laboratory, and fieldwork. The equivalent of three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: The following with a grade of at least C- in each: Biology 311D or 315H, and Chemistry 302 or 302H.

**Topic 9: Endocrinology.** Endocrinology, with special reference to lower vertebrates and evolution of control systems. Marine Science 352 (Topic 9) and 382 (Topic 9: Endocrinology) may not both be counted. May count as zoology. Prerequisite: Previous courses in physiology and consent of instructor.

**Topic 12: Adaptive Physiology of Marine Organisms.** Selected topics in the comparative physiology of marine organisms and their environmental adaptations. Prerequisite: Previous course in cell physiology or consent of instructor.

**Topic 13: Microclimatology.** Physical and thermal characteristics of the atmospheric surface layer, with particular reference to coastal environments.

**Topic 16: Ocean Engineering.** Description of ocean waves and tides, methods of wave forecasting, classroom and field exercises. Prerequisite: Consent of instructor.

**Topic 18: Marine Atmospheric Chemistry.** Atmospheric particle chemistry; sea-surface films, atmospheric organic matter; air-sea chemical fractionation; carbon, nitrogen, sulfur cycles. Prerequisite: Consent of instructor.

**Topic 20: General Marine Phycology.** Survey of benthic algae and phytoplankton of the Texas coast; systematics, morphology, life history and culturing techniques.

**Topic 21: Ecology of Marine Fungi.** Biology of the fungi with emphasis on ecological, morphological, and developmental aspects and culturing techniques.

**Topic 22: Oceanography.** Consideration of current understanding of the chemistry and biology of the oceans.

#### MNS 352C. Estuarine Ecology.

Explores general ecological principles of estuarine environments in Texas including physiography, hydrography, and plant and animal community structure and productivity. The equivalent of three lecture hours a week for one semester; additional lecture and field/lab hours may be required. Marine Science 352 (Topic 8) and 352C may not both be counted. Prerequisite: The following with a grade of at least C- in each: Biology 311D or 315H, and Chemistry 302 or 302H.

#### MNS 352D. Marine Botany.

Exploration of the marine algae and seagrasses of the south Texas coast, with emphasis on their taxonomy, physiology, and ecology; may include field trips to representative coastal habitats. The equivalent of three lecture hours a week for one semester; additional lecture and field/ laboratory hours may be required. Prerequisite: The following with a grade of at least C- in each: Biology 311D or 315H, and Chemistry 302 or 302H.

#### MNS 352E. Marine Conservation Biology.

Explores how human activities influence the natural functioning and diversity of marine ecosystems and examines conservation efforts aimed to promote the sustainability of coastal habitats; may include several field excursions to local/regional marine ecosystems including sensitive coastal marshes and seagrass communities. Encourages the development of creative and critical thinking skills through numerous classroom activities focused on developing holistic understandings of marine ecosystems and the complexities of conservation science. The equivalent of three lecture hours a week for one semester; additional lecture and field/laboratory hours may be required. Marine Science 353 (Topic: Marine Conservation Biology) and 352E may not both be counted.

Prerequisite: Biology 311D and Chemistry 302 or 302H with a grade of at least C- in each.

## MNS 152L, 252L. Principles of Marine Science: Laboratory Studies.

A laboratory course with one-day field trips (which may include weekends) to local estuarine and coastal habitats. Includes pre- and post-field trip laboratory hours. For each semester hour of credit earned, three or four field/laboratory sessions, scheduled throughout the semester. May be counted toward the Bachelor of Science in Biology (Option III: Marine and Freshwater Biology) and toward other undergraduate degrees in biology. May be repeated for credit when the topics vary. Prerequisite: Credit or registration for Marine Science 352.

#### MNS 152R. Marine Science Research and Reporting.

Reviews the planning, conduct, and communication of marine science research, including hypothesis generation, experimental design, data analysis, and scientific writing and presentation. The equivalent of one lecture hour a week for one semester. Marine Science 148, 348 (Topic 1) and 152R may not both be counted. Prerequisite: Upper-division standing and concurrent enrollment in Marine Science 170, 270, or 370.

## MNS 152S, 252S. Principles of Marine Science: Undergraduate Seminar.

Guest lectures by local and visiting research scientists on a variety of topics in marine and environmental science. Each seminar is followed by a separate one-hour discussion to give students an opportunity to meet directly with the scientist. For each semester hour of credit earned, one lecture/discussion a week for one semester. May be counted toward the Bachelor of Science in Biology (Option III: Marine and Freshwater Biology) and toward other undergraduate degrees in biology. May be repeated for credit when the topics vary.

## MNS 152T, 252T. Principles of Marine Science: Special Topics.

Advanced research topics in marine science relevant to critical habitats, organisms, or processes. The equivalent of one or two lecture hours a week for one semester; additional lecture and field/lab hours may be required. May be counted toward the Bachelor of Science in Biology (Option III: Marine and Freshwater Biology) and toward other undergraduate degrees in biology. May be repeated for credit when the topics vary. Prerequisite: The following with a grade of at least C- in each: Biology 311D or 315H, and Chemistry 302 or 302H.

#### MNS 353. Topics in Marine Science.

The equivalent of three lecture hours a week for one semester; additional lecture and field/laboratory hours may be required. May be repeated for credit when the topics vary. Prerequisite: The following with a grade of at least C- in each: Biology 311D or 315H, and Chemistry 302 or 302H.

**Topic 2: Fish Adaptations to Coastal Ecosystems.** Quantitative ecological comparisons of zoogeographical abundance and distribution with population, metabolic, and growth parameters. Additional prerequisite: Fifteen semester hours of coursework in biology and/or zoology.

**Topic 4: Current Research.** Research instruction/participation in marine science. Laboratory and field activity with emphasis on faculty contact.

**Topic 5: Seafloor Mining.** Study of seafloor mineral resources, including problems and policies related to exploration, mining, environmental concerns, assessment, and industrial development. **Topic 6: Marine Ecology.** Independent study in marine ecology, literature research, and comprehensive writing. Report required. Additional prerequisite: Upper-division standing in a natural science, engineering, or education.

**Topic 7: Marine Sedimentology.** Selected topics and problems concerning the depositional processes, controls, and distribution of marine sediments.

**Topic 8: Marine Chemistry.** Study of the processes controlling the chemistry of natural waters, the oceans as a chemical system, and the impact of human activities on these systems.

**Topic 14: Marine Isotope Geochemistry.** The use of isotopes (stable, radiogenic, uranium series, and anthropogenic) in the study of marine science.

**Topic 15: Interdisciplinary Classroom Field Methods.** Uses the interdisciplinary nature of marine science to focus on inquiry-based instruction, constructivist-oriented teaching strategies, and field explorations.

**Topic 17: Marine Fish Physiology.** Physiology of major organ systems of marine fishes, with emphasis on adaptations to marine environments. Includes osmoregulation, nutrition, circulation, excretion, reproduction, sensory physiology, and endocrine control. Additional prerequisite: Biology 311D, and Chemistry 302 or 302H.

#### MNS 354. Marine Invertebrates.

Study of invertebrate taxonomy, structure, behavior, and ecology; may include field sampling and laboratory studies of invertebrate habitats of the Texas coast. The equivalent of three lecture hours a week for one semester; additional lecture and field/laboratory hours may be required. Prerequisite: The following with a grade of least C- in each: Biology 311D or 315H, and Chemistry 302 or 302H.

#### MNS 354C. Biology of Fishes.

Anatomy, physiology, behavior, life history, taxonomy, and distribution of fishes; may include field sampling and laboratory studies of the coastal biota. The equivalent of three lecture hours a week for one semester; additional lecture and field/laboratory hours may be required. Prerequisite: The following with a grade of at least C- in each: Biology 311D or 315H, and Chemistry 302 or 302H.

#### MNS 354E. Aquatic Microbiology.

Ecology, physiology, distribution, and growth of heterotrophic and autotrophic bacteria and fungi in waters and sediments. The equivalent of three lecture hours a week for one semester; additional lecture and field/laboratory hours may be required. Marine Science 354E and 384E may not both be counted. Prerequisite: The following with a grade of at least C- in each: Biology 311D or 315H, and Chemistry 302 or 302H.

#### MNS 354F. Marine Geology.

Survey of the origin, structure, stratigraphy, and sedimentology of marine basins and continental margins. Three lecture hours a week for one semester. Marine Science 354F and 384F may not both be counted. Prerequisite: Upper-division standing; and six semester hours of coursework in chemistry, marine science, or geological sciences, or consent of instructor.

#### MNS 354J. Marine Chemistry.

Introduction to marine and environmental chemistry, including the distribution of elements in seawater, the geochemical and oceanographic processes controlling and affected by these distributions, and the effects of human activities on marine chemical processes. The equivalent of three lecture hours a week for one semester; additional lecture and field/ laboratory hours may be required. Prerequisite: The following with a grade of at least C- in each: Biology 311D or 315H, and Chemistry 302 or 302H.

#### MNS 354Q. Marine Environmental Science.

Application of the principles of marine science to the study of environmental issues: toxicology, biogeochemical cycles, and the biological and ecological impacts of zenobiotic materials in the coastal zone. The equivalent of two lecture hours and one laboratory hour a week for one semester; additional lecture and field/laboratory hours may be required. Prerequisite: The following with a grade of at least C- in each: Biology 311D or 315H, and Chemistry 302 or 302H.

#### MNS 354T. Biological Oceanography.

Introduction to the organisms in the sea, their adaptations to the environment, and the factors that control their distribution and abundance; may include laboratory and field work with organisms found in the coastal waters of Texas. The equivalent of three lecture hours a week for one semester; additional lecture and field/laboratory hours may be required. Prerequisite: The following with a grade of at least C-: Biology 311D or 315H, and Chemistry 302 or 302H.

#### MNS 354U. Biology of Sharks, Skates, and Rays.

Ecology, anatomy, and physiology of elasmobranch fishes. The equivalent of three lecture hours a week for one semester; additional lecture and field/laboratory hours may be required. Prerequisite: The following with a grade of at least C- in each: Biology 311D or 315H, and Chemistry 302 or 302H.

#### MNS 355C. Physiology of Fishes.

Physiology of major organ systems of both marine and freshwater fishes. The equivalent of three lecture hours a week for one semester; additional lecture and field/laboratory hours may be required. Prerequisite: The following with a grade of at least C- in each: Biology 311D or 315H, and Chemistry 302 or 302H.

#### MNS 356. Ecosystem Oceanography.

An exploration of interconnections within and among marine ecosystems, as well as their linkages to climate, human activity, and adjacent freshwater and terrestrial environments. Emphasis will be placed on Gulf of Mexico ecosystems; may include hands-on field and laboratory activities. The equivalent of three lecture hours a week for one semester; additional lecture and field/laboratory hours may be required. Marine Science 352 (Topic: Ecosystem Oceanography) and 356 may not both be counted. Prerequisite: The following with a grade of at least C- in each: Biology 311D or 315H, and Chemistry 302 or 302H.

#### MNS 357. Marine Phytoplankton Diversity.

The taxonomy of the major phytoplankton groups, their physiology, and their role in marine ecosystem; may include field and/or laboratory hours. The equivalent of three lecture hours a week for one semester; additional lecture and field/laboratory hours may be required. Marine Science 353 (Topic: Diversity Marine Phytoplankton) and 357 may not both be counted. Prerequisite: The following with a grade of at least C- in each: Biology 311D or 315H, and Chemistry 302 or 302H.

#### MNS 367K. Human Exploration and Exploitation of the Sea.

Review of the history of ocean exploration including major oceanographic expeditions. Discussion of current topics in ocean exploration and exploitation of marine resources, the impact of resource exploitation on biological systems, and the development of marine policy. An oral presentation is required. The equivalent of three lecture hours a week for one semester; additional lecture and field/laboratory hours may be required. Prerequisite: The following with a grade of at least C- in each: Biology 311D or 315H, and Chemistry 302 or 302H.

#### MNS 170, 270, 370. Special Studies in Marine Science.

Supervised individual instruction and research in marine science field and laboratory techniques. The equivalent of one, two, or three class hours a week for one semester, at the Marine Science Institute at Port Aransas. May be repeated for credit. Prerequisite: Six semester hours of upper-division coursework in science, and a University grade point average of at least 2.50.

## **Department of Mathematics**

The Department of Mathematics offers a wide variety of courses both for math majors and for non-majors. Students interested in mathematics as a first or second major should consult the advisers in the Mathematics, Physics, and Astronomy Advising Center, in RLM 4.101.

Course prerequisites are enforced. Most entry-level mathematics courses have an appropriate score on the mathematics placement exam as a prerequisite. In such courses, students must be prepared to present proof of their score immediately after classes have begun; those unable to meet the score will be dropped.

Students may check the current *Course Schedule* or go to the Department of Mathematics website (http://www.ma.utexas.edu) for details about the prerequisite required for their course.

Students who plan to use transfer credit to meet the prerequisite of a mathematics course must submit an official transcript to the Office of Admissions so that the credit may be added to their official university record. In addition to sending a transcript, students are encouraged to retain hard copies of their grade reports for proof of prerequisite until their transcripts are processed.

Students who wish to enroll in conference courses in the Department of Mathematics must submit consent of instructor forms to the department before registering. Forms are available in the Advising Center.

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

### **Actuarial Foundations: ACF**

#### **Lower-Division Courses**

#### ACF 110C, 210C, 310C, 410C. Conference Course.

Supervised study of selected subjects by individual arrangement with department and instructor. Conference course. May be repeated for credit. Prerequisite: Written consent of instructor.

## ACF 110T. Conference Course: Texas Department of Insurance Internship.

Supervised internship at the Texas Department of Insurance. Conference course. May be repeated for credit. Admission by application only. Students must apply to the director of the concentration in actuarial studies the semester before they take the course.

#### ACF 112M. Actuarial Laboratory on Probability and Statistics.

Problems and supplementary instruction in probability and statistics, especially as required for the Society of Actuaries and Casualty Actuarial Society Exam 110. Three laboratory hours a week for one semester. Prerequisite: Mathematics 362K, credit or registration for Mathematics 378K, and consent of the director of the concentration in actuarial studies.

#### **Upper-Division Courses**

#### ACF 329. Theory of Interest.

Same as Mathematics 329F. Measurement of interest, present and accumulated value, amortization, sinking funds, bonds, duration, and immunization. Covers the interest-theory portion of an exam of the Society of Actuaries and the Casualty Actuarial Society. Three

lecture hours a week for one semester. Only one of the following may be counted: Actuarial Foundations 329, Mathematics 329F, 389F. Prerequisite: Mathematics 408D, 308L, 408L, or 408S with a grade of at least C-.

#### ACF 129D. Introductory Actuarial Financial Mathematics.

Introductory analysis of financial derivatives. Covers the financial derivatives portion of the syllabus for the professional actuarial exam on financial mathematics. One lecture hour a week for one semester. Offered on the pass/fail basis only. Prerequisite: Credit with a grade of at least C- or registration for Actuarial Foundations 329 or Mathematics 329F.

### **Mathematics: M**

#### **Lower-Division Courses**

#### M 301 (TCCN: MATH 1314). College Algebra.

Subjects include a brief review of elementary algebra; linear, quadratic, exponential, and logarithmic functions; polynomials; systems of linear equations; applications. Three lecture hours a week for one semester. Usually offered only in the summer session. May not be counted toward a degree in mathematics. Credit for Mathematics 301 may not be earned after a student has received credit for any calculus course with a grade of C- or better. Prerequisite: A passing score on the mathematics section of the Texas Higher Education Assessment (THEA) test (or an appropriate assessment test).

#### M 302 (TCCN: MATH 1332). Introduction to Mathematics.

Intended primarily for general liberal arts students seeking knowledge of the nature of mathematics as well as training in mathematical thinking and problem solving. Topics include number theory and probability; additional topics are chosen by the instructor. Three lecture hours a week for one semester. Mathematics 302 and 303F may not both be counted. A student may not earn credit for Mathematics 302 after having received credit for any calculus course. May not be counted toward a degree in the College of Natural Sciences. Prerequisite: Texas Success Initiative (TSI) exemption or a TSI Mathematics Assessment score of 350 or higher.

#### M 303D (TCCN: MATH 1324). Applicable Mathematics.

An entry-level course for the nontechnical student, dealing with some of the techniques that allow mathematics to be applied to a variety of problems. Topics include linear and quadratic equations, systems of linear equations, matrices, probability, statistics, exponential and logarithmic functions, and mathematics of finance. Three lecture hours a week for one semester. Mathematics 303D and 303F may not both be counted. A student may not earn credit for Mathematics 303D after having received credit for Mathematics 305G or any calculus course. May not be counted toward a degree in the College of Natural Sciences. Prerequisite: An appropriate score on the mathematics placement exam.

#### M 303F. Mathematics of Investment.

Simple and compound interest, equivalent rates, equivalent values, annuities, amortization, sinking funds, bonds, depreciation. Three lecture hours a week for one semester. Mathematics 302 and 303F may not both be counted; Mathematics 303D and 303F may not both be counted. May not be counted toward the major requirement for the Bachelor of Arts, Plan I, degree with a major in mathematics or toward the Bachelor of Science in Mathematics degree. Prerequisite: Three units of high school mathematics at the level of Algebra I or higher.

## M 403K (TCCN: MATH 1425). Calculus I for Business and Economics.

Differential and integral calculus of algebraic, logarithmic, and exponential functions with applications. Three lecture hours and two

discussion sessions a week for one semester. Only one of the following may be counted: Mathematics 403K, 408C, 408K, 408N. May not be counted toward a degree in the College of Natural Sciences. Prerequisite: An appropriate score on the mathematics placement exam.

#### M 403L. Calculus II for Business and Economics.

Differential and integral calculus of functions of several variables with applications, infinite series, improper integrals; introductions to probability, differential equations, matrices, systems of linear equations, and linear programming. Three lecture hours and two discussion sessions a week for one semester. Mathematics 403L and 408L (or 308L) may not both be counted. May not be counted toward the major requirement for the Bachelor of Arts, Plan I, degree with a major in mathematics or toward the Bachelor of Science in Mathematics degree. Prerequisite: Mathematics 403K, 408C, 308L, or 408N with a grade of at least C-.

#### M 305E. Analytic Geometry.

Combines development of methods (including adequate treatment of theory) and acquisition of skills with applications. Three lecture hours a week for one semester. Mathematics 305E and 305K may not both be counted. Mathematics 305E and 305G may not both be counted toward the major requirement for the Bachelor of Arts, Plan I, degree with a major in Mathematics or towards the Bachelor of Science in Mathematics degree. Prerequisite: Mathematics 301.

#### M 305G (TCCN: MATH 2312). Preparation for Calculus.

Study of advanced functions and their graphs and applications, including exponential, logarithmic, and trigonometric functions. Introduction to rates, slopes, and derivatives. Three lecture hours a week for one semester. Mathematics 305G and any college-level trigonometry course may not both be counted. A student may not earn credit for Mathematics 305G after having received credit for any calculus course with a grade of at least C-. Mathematic 301, 305G, and equivalent courses may not be counted toward a degree in mathematics. Prerequisite: An appropriate score on the mathematics placement exam.

## M 408C (TCCN: MATH 2417). Differential and Integral Calculus.

Introduction to the theory and applications of differential and integral calculus of functions of one variable; topics include limits, continuity, differentiation, the mean value theorem and its applications, integration, the fundamental theorem of calculus, and transcendental functions. Three lecture hours and two discussion hours a week for one semester. Only one of the following may be counted: Mathematics 403K, 408C, 408K, 408N. Prerequisite: An appropriate score on the mathematics placement exam or Mathematics 305G with a grade of at least B-

## M 408D (TCCN: MATH 2419). Sequences, Series, and Multivariable Calculus.

Certain sections of this course are designated as advanced placement or honors sections; they are restricted to students who have scored well on the Advanced Placement Calculus BC exam or have the consent of the mathematics adviser. This is the second semester of the accelerated calculus sequence. The theory and applications of sequences and infinite series, including those involving functions of one variable, and an introduction to the theory and applications of differential and integral calculus of functions of several variables; subjects include methods of integration, parametric equations, sequences, infinite series, power series, functions of several variables, partial derivatives, and multiple integrals. Three lecture hours and two discussion hours a week for one semester. Only one of the following may be counted: Mathematics 403L, 408D, 408M (or 308M). Prerequisite: Mathematics 408C, 408L, or 408S with a grade of at least C-.

#### M 408K (TCCN: MATH 2413). Differential Calculus.

Introduction to the theory and applications of differential calculus of functions of one variable; topics include limits, continuity, differentiation, and the mean value theorem and its applications. Three lecture hours and two discussion hours a week for one semester. Only one of the following may be counted: Mathematics 403K, 408C, 408K, 408N. Prerequisite: An appropriate score on the mathematics placement exam or Mathematics 305G with a grade of at least B-.

#### M 308L, 408L. Integral Calculus.

Introduction to the theory and applications of integral calculus of functions of one variable; topics include integration, the fundamental theorem of calculus, transcendental functions, sequences, and infinite series. For Mathematics 308L, three lecture hours a week for one semester; for 408L, three lecture hours and two discussion hours a week for one semester. Only one of the following may be counted: Mathematics 403L, 408L (or 308L), 408S. Prerequisite: Mathematics 408C, 408K, or 408N with a grade of at least C-, or Mathematics 408R with a grade of at least B.

#### M 308M, 408M. Multivariable Calculus.

Introduction to the theory and applications of differential and integral calculus of functions of several variables. Includes parametric equations, polar coordinates, vectors, vector calculus, functions of several variables, partial derivatives, gradients, and multiple integrals. For Mathematics 308M, three lecture hours a week for one semester; for 408M, three lecture hours and two discussion hours a week for one semester. Only one of the following may be counted: Mathematics 403L, 408D, 408M (or 308M). Prerequisite: Mathematics 408L or 408S with a grade of at least C-.

## M 408N (TCCN: MATH 2413). Differential Calculus for Science.

Restricted to students in the College of Natural Sciences. Introduction to the theory of differential calculus of functions of one variable, and its application to the natural sciences. Subjects may include limits and differentiation, with applications to rates of change, extremes, graphing, and exponential growth and decay. Three lecture hours and two discussion hours a week for one semester. Only one of the following may be counted: Mathematics 403K, 408C, 408K, 408N. Prerequisite: An appropriate score on the mathematics placement exam or Mathematics 305G with a grade of at least B-.

#### M 408R. Differential and Integral Calculus for the Sciences.

A calculus course for students in the life sciences. Emphasizes representations and analysis of data. Subjects include functions, rates, and derivatives and their applications to problems in biology; differential equations; Riemann integrals; the Euler method; and fundamental theorems of calculus. Three lecture hours and two discussion hours a week for one semester. May not be counted by students with credit for Mathematics 408C, 408K, or 408N. Prerequisite: An appropriate score on the mathematics placement exam or Mathematics 305G with a grade of at least B-.

#### M 408S (TCCN: MATH 2414). Integral Calculus for Science.

Restricted to students in the College of Natural Sciences. Introduction to the theory of integral calculus of functions of one variable, and its applications to the natural sciences. Subjects may include integration and its application to area and volume, and transcendental functions, sequences, and series and their application to numerical methods. Three lecture hours and two discussion hours a week for one semester. Only one of the following may be counted: Mathematics 403L, 408L (or 308L), 408S. Prerequisite: Mathematics 408C, 408K, or 408N with a grade of at least C-, or Mathematics 408R with a grade of at least B.

#### M 110C, 210C, 310C, 410C. Conference Course.

Supervised study in mathematics, with hours to be arranged. May be repeated for credit. Prerequisite: Written consent of instructor; forms are available in the department office or in the Mathematics, Physics, and Astronomy Advising Center.

#### M 210E. Emerging Scholars Seminar.

Restricted to students in the Emerging Scholars Program. Supplemental problem-solving laboratory for precalculus, calculus, or advanced calculus courses for students in the Emerging Scholars Program. Three or four laboratory hours a week for one semester. May be repeated for credit. Offered on the pass/fail basis only.

#### M 310P. Modern Mathematics: Plan II.

Restricted to Plan II students. Significant developments in modern mathematics. Topics may include fractals, the fourth dimension, statistics and society, and techniques for thinking about quantitative problems. Three lecture hours a week for one semester. May not be counted toward a degree in mathematics.

#### M 110T, 210T, 310T, 410T. Topics in Mathematics.

One, two, three, or four lecture hours a week for one semester. May be repeated for credit when the topics vary.

#### M 315C. Foundations, Functions, and Regression Models.

In-depth study of topics from secondary school mathematics. Emphasizes the development of the concept of function, exploring function patterns in data sets, and the connections between the main topics of mathematics associated with a secondary school curriculum. Use of appropriate technology is explored. Three lecture hours a week for one semester. Prerequisite: Credit or registration for Mathematics 408C and enrollment in a teaching preparation program, or consent of instructor.

#### M 316K (TCCN: MATH 1350). Foundations of Arithmetic.

Restricted to students in a teacher preparation program. An analysis, from an advanced perspective, of the concepts and algorithms of arithmetic, including sets; numbers; numeration systems; definitions, properties, and algorithms of arithmetic operations; and percents, ratios, and proportions. Problem solving is stressed. Three lecture hours a week for one semester. May not be counted toward the major requirement for the Bachelor of Arts, Plan I, degree with a major in mathematics or toward the Bachelor of Science in Mathematics degree. Credit for Mathematics 316K may not be earned after the student has received credit for any calculus course with a grade of C- or better, unless the student is registered in the College of Education. Prerequisite: One of the following with a grade of at least C-: Mathematics 301, 302, 303D, 305G, 316, Educational Psychology 371, Statistics and Data Sciences 302, 304, or 306.

## M 316L (TCCN: MATH 1351). Foundations of Geometry, Statistics, and Probability.

Restricted to students in a teacher preparation program. An analysis, from an advanced perspective, of the basic concepts and methods of geometry, statistics, and probability, including representation and analysis of data; discrete probability, random events, and conditional probability; measurement; and geometry as approached through similarity and congruence, through coordinates, and through transformations. Problem solving is stressed. Three lecture hours a week for one semester. May not be counted toward the major requirement for the Bachelor of Arts, Plan I, degree with a major in mathematics or toward the Bachelor of Science in Mathematics degree. Credit for Mathematics 316L may not be earned after the student has received credit for any calculus course with a grade of C- or better, unless the student is registered in the College of Education. Prerequisite: Mathematics 316K with a grade of at least C.

#### M 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Mathematics.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Mathematics. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### M 325K. Discrete Mathematics.

Provides a transition from the problem-solving approach of Mathematics 408C and 408D to the rigorous approach of advanced courses. Subjects include logic, set theory, relations and functions, combinatorics, and graph theory and graph algorithms. Three lecture hours a week for one semester. Prerequisite: Mathematics 408D, 408L, or 408S with a grade of at least C-.

#### M 326K. Foundations of Number Systems.

Restricted to students in a teacher preparation program or who have consent of instructor. Study of number-related topics in middle-grade and secondary school mathematics. Topics include place value; meanings of arithmetic operations; analysis of computation methods; historical development of number concepts and notation; and rational, irrational, algebraic, transcendental, and complex numbers. Emphasis is on communicating mathematics, developing pedagogical understanding of concepts and notation, and using both informal reasoning and proof. Three lecture hours a week for one semester. Prerequisite: Mathematics 408D, 408L, or 408S with a grade of at least C-.

#### M 427J. Differential Equations with Linear Algebra.

Ordinary differential equations, introduction to vector spaces, linear operators and eigenvalues, systems of linear differential equations, introduction to partial differential equations and Fourier series. Five lecture hours a week for one semester. Mathematics 427J and 427K may not both be counted. Prerequisite: Mathematics 408D, 408L, or 408S with a grade of at least C-.

#### M 427K. Advanced Calculus for Applications I.

Ordinary and partial differential equations and Fourier series. Five lecture hours a week for one semester. Mathematics 427J and 427K may not both be counted. Prerequisite: Mathematics 408D, 408L, or 408S with a grade of at least C-.

#### M 427L. Advanced Calculus for Applications II.

Matrices, elements of vector analysis and calculus of functions of several variables, including gradient, divergence, and curl of a vector field, multiple integrals and chain rules, length and area, line and surface integrals, Green's theorems in the plane and space, and, if time permits, complex analysis. Five class hours a week for one semester. Prerequisite: Mathematics 408D, 408L, or 408S with a grade of at least C-.

#### M 328K. Introduction to Number Theory.

Provides a transition from the problem-solving approach of Mathematics 408C and 408D to the rigorous approach of advanced courses. Properties of the integers, divisibility, linear and quadratic forms, prime numbers, congruences and residues, quadratic reciprocity, number theoretic functions. Three lecture hours a week for one semester. Prerequisite: Mathematics 325K or 341 with a grade of at least C-.

#### M 329F. Theory of Interest.

Same as Actuarial Foundations 329. Measurement of interest, present and accumulated value, amortization, sinking funds, bonds, duration, and immunization. Covers the interest-theory portion of an exam of the Society of Actuaries and the Casualty Actuarial Society. Three lecture hours a week for one semester. Only one of the following may be counted: Actuarial Foundations 329, Mathematics 329F, 389F. Prerequisite: Mathematics 408D, 308L, 408L, or 408S with a grade of at least C-.

#### M 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Mathematics.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Mathematics. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### M 329W. Cooperative Mathematics.

This course covers the work period of mathematics students in the Cooperative Education program, which provides supervised work experience by arrangement with the employer and the supervising instructor. Forty laboratory hours a week for one semester. The student must repeat the course each work period and must take it twice to receive credit toward the degree; at least one of these registrations must be during a long-session semester. No more than three semester hours may be counted toward the major requirement; no more than six semester hours may be counted toward the degree. The student's first registration must be on the pass/fail basis. Prerequisite: Application through the College of Natural Sciences Career Design Center; Mathematics 408D, 408L, or 408S with a grade of at least C-; a grade of at least C- in two of the following courses: Mathematics 325K, 427J or 427K, 341, 362K, or 378K; and consent of the undergraduate adviser.

#### M 333L. Structure of Modern Geometry.

Axiom systems, transformational geometry, introduction to non-Euclidean geometries, and other topics in geometry; use of these ideas in teaching geometry. Three lecture hours a week for one semester. Prerequisite: Mathematics 408D, 408L, or 408S with a grade of at least C-; or upper-division standing and consent of instructor.

#### M 339C. Actuarial Case Studies.

Introduces aspects of basic ratemaking, reserving, catastrophe modeling, and rate classification in a property & casualty actuarial context. Explores loss & premium trending, loss triangles, loss development, loss ratios, on-level premium, and accident year vs. calendar year vs. policy year data. Three lecture hours a week for one semester. Prerequisite: Actuarial Foundations 329 or Mathematics 329F with a grade of at least C-; and M339J or M339U with a grade of at least C-.

#### M 339D. Introduction to Financial Mathematics for Actuaries.

Covers the financial derivative subjects on the Society of Actuary FM/2 exam: general derivatives, options, hedging, investment strategies, forwards, futures, and swaps. Covers option pricing techniques in the MFE/3F exam: binomial option pricing, Monte Carlo Valuation using risk neutral probabilities, and Black-Scholes. Three lecture hours a week for one semester. Prerequisite: Actuarial Foundations 329 or Mathematics 329F; and Mathematics 362K with a grade of at least C-.

#### M 339J. Probability Models with Actuarial Applications.

Introductory actuarial models for life insurance, property insurance, and annuities. With Mathematics 349P, covers the syllabus for the

professional actuarial exam on model construction. Three lecture hours a week for one semester. Prerequisite: Mathematics 358K or 378K with a grade of at least C-.

#### M 139S. Seminar on Actuarial Practice.

Presentations by working actuaries on current issues in actuarial practice. One lecture hour a week for one semester. Offered on the pass/ fail basis only. Prerequisite: Actuarial Foundations 329 or Mathematics 329F; Mathematics 339J or 339U with a grade of at least C-; and credit with a grade of at least C- or registration for one of the following: Mathematics 339J, 339U, 339V, 349P.

#### M 339U. Actuarial Contingent Payments I.

Intermediate actuarial models for life insurance, property insurance, and annuities. Three lecture hours a week for one semester. Prerequisite: Mathematics 362K with a grade of at least C-; credit with a grade of at least C- or registration for Actuarial Foundations 329 or Mathematics 329F; and credit with a grade of at least C- or registration for Mathematics 340L or 341.

#### M 339V. Actuarial Contingent Payments II.

Advanced actuarial models for life insurance, property insurance, and annuities. Three lecture hours a week for one semester. Prerequisite: Actuarial Foundations 329 or Mathematics 329F, and M 339U with a grade of at least C- in each.

#### M 339W. Financial Mathematics for Actuarial Applications.

Pricing, stock price, and interest rate models for actuarial applications. Tools include lognormal distribution, Brownian motion, Black-Scholes, and delta hedging. Three lecture hours a week for one semester. Prerequisite: Mathematics 339D with a grade of at least C-.

#### M 340L. Matrices and Matrix Calculations.

Restricted to non-mathematics majors. Techniques of matrix calculations and applications of linear algebra. Three lecture hours a week for one semester. Only one of the following may count: Mathematics 340L, 341, Statistics and Data Sciences 329C, or Statistics and Scientific Computation 329C. Prerequisite: Mathematics 408C, 408K, or 408N with a grade of at least C-.

#### M 341. Linear Algebra and Matrix Theory.

Restricted to mathematics majors. Vector spaces, linear transformations, matrices, linear equations, determinants. Some emphasis on rigor and proofs. Three lecture hours a week for one semester. Only one of the following may count: Mathematics 340L, 341, Statistics and Data Sciences 329C, or Statistics and Scientific Computation 329C. Prerequisite: Mathematics 408D, 408L, or 408S with a grade of at least C-.

#### M 343K. Introduction to Algebraic Structures.

Elementary properties of groups and rings, including symmetric groups, properties of the integers, polynomial rings, elementary field theory. Three lecture hours a week for one semester. Students who have received a grade of C- or better in Mathematics 373K may not take Mathematics 343K. Prerequisite: Consent of the undergraduate adviser, or two of the following courses with a grade of at least C- in each: Mathematics 325K or Philosophy 313K, Mathematics 328K, Mathematics 341.

#### M 343L. Applied Number Theory.

Basic properties of integers, including properties of prime numbers, congruences, and primitive roots. Introduction to finite fields and their vector spaces with applications to encryption systems and coding theory. Three lecture hours a week for one semester. Prerequisite: Mathematics 328K or 343K with a grade of at least C-.

#### M 343M. Error-Correcting Codes.

Introduction to applications of algebra and number theory to errorcorrecting codes, including finite fields, error-correcting codes, vector spaces over finite fields, Hamming norm, coding, and decoding. Three lecture hours a week for one semester. Prerequisite: Mathematics 328K or 341 with a grade of at least C-.

#### M 344K. Intermediate Symbolic Logic.

Same as Philosophy 344K. A second-semester course in symbolic logic: formal syntax and semantics, basic metatheory (soundness, completeness, compactness, and Loewenheim-Skolem theorems), and further topics in logic. Three lecture hours a week for one semester. Prerequisite: Philosophy 313, 313K, or 313Q.

#### M 346. Applied Linear Algebra.

Emphasis on diagonalization of linear operators and applications to dynamical systems and ordinary differential equations. Other subjects include inner products and orthogonality, normal mode expansions, vibrating strings and the wave equation, and Fourier series. Three lecture hours a week for one semester. Prerequisite: Mathematics 341 or 340L with a grade of at least C-.

#### M 348. Scientific Computation in Numerical Analysis.

Introduction to mathematical properties of numerical methods and their applications in computational science and engineering. Introduction to object-oriented programming in an advanced language. Study and use of numerical methods for solutions of linear systems of equations; nonlinear least-squares data fitting; numerical integration; and solutions of multidimensional nonlinear equations and systems of initial value ordinary differential equations. Three lecture hours a week for one semester. Prerequisite: Computer Science 303E or 307, and Mathematics 341 or 340L with a grade of at least C-.

#### M 349P. Actuarial Statistical Estimates.

Statistical estimation procedures for random variables and related quantities in actuarial models. With Mathematics 339J, covers the syllabus for the professional actuarial exam on model construction. Three lecture hours a week for one semester. Prerequisite: Mathematics 339J, and 341 or 340L, with a grade of at least C- in each.

#### M 349R. Applied Regression and Time Series.

Introduction to simple and multiple linear regression and to elementary time-series models, including auto-regressive and moving-average models. Emphasizes fitting models to data, evaluating models, and interpreting results. Three lecture hours a week for one semester. Prerequisite: Mathematics 339J or 339U, and 358K or 378K, with a grade of at least C- in each.

#### M 349T. Time Series and Survival-Model Estimation.

Introduction to the probabilistic and statistical properties of time series; parameter estimation and hypothesis testing for survival models. Covers 30 percent of the syllabus for exam #4 of the Society of Actuaries and the Casualty Actuarial Society. Three lecture hours a week for one semester. Prerequisite: Mathematics 339U, 341 or 340L, and 358K or 378K.

#### M 358K. Applied Statistics.

Exploratory data analysis, correlation and regression, data collection, sampling distributions, confidence intervals, and hypothesis testing. Three lecture hours a week for one semester. Prerequisite: Mathematics 362K with a grade of at least C-.

#### M 360M. Mathematics as Problem Solving.

Discussion of heuristics, strategies, and methods of evaluating problem solving, and extensive practice in both group and individual problem solving. Communicating mathematics, reasoning, and connections among topics in mathematics are emphasized. Three lecture hours a week for one semester. Prerequisite: Mathematics 408D, 408L, or 408S with a grade of at least C-; and written consent of instructor.

#### M 361. Theory of Functions of a Complex Variable.

Elementary theory and applications of analytic functions, series, contour integration, and conformal mappings. Three lecture hours a week for one semester. Prerequisite: Mathematics 427J, 427K, or 427L with a grade of at least C-.

#### M 361K. Introduction to Real Analysis.

A rigorous treatment of the real number system, of real sequences, and of limits, continuity, derivatives, and integrals of real-valued functions of one real variable. Three lecture hours a week for one semester. Students who have received a grade of C- or better in Mathematics 365C may not take Mathematics 361K. Prerequisite: Consent of the undergraduate adviser, or two of the following courses with a grade of at least C- in each: Mathematics 325K or Philosophy 313K, Mathematics 328K, Mathematics 341.

#### M 362K. Probability I.

An introduction to the mathematical theory of probability, fundamental to further work in probability and statistics, includes basic probability properties, conditional probability and independence, various discrete and continuous random variables, expectation and variance, central limit theorem, and joint probability distributions. Three lecture hours a week for one semester. Mathematics 362K and Statistics and Scientific Computation 321 may not both be counted. Prerequisite: Mathematics 408D, 408L, or 408S with a grade of at least C-.

#### M 362M. Introduction to Stochastic Processes.

Introduction to Markov chains, birth and death processes, and other topics. Three lecture hours a week for one semester. Prerequisite: Mathematics 362K with a grade of at least C-.

#### M 364K. Vector and Tensor Analysis I.

Invariance, vector algebra and calculus, integral theorems, general coordinates, introductory differential geometry and tensor analysis, applications. Three lecture hours a week for one semester. Prerequisite: Mathematics 427J, 427K, or 427L with a grade of at least C-.

#### M 364L. Vector and Tensor Analysis II.

Continuation of Mathematics 364K, with emphasis on tensor and extensor analysis. Riemannian geometry and invariance. Three lecture hours a week for one semester. Prerequisite: Mathematics 364K with a grade of at least C-.

#### M 365C. Real Analysis I.

A rigorous treatment of the real number system, Euclidean spaces, metric spaces, continuity of functions in metric spaces, differentiation and Riemann integration of real-valued functions of one real variable, and uniform convergence of sequences and series of functions. Three lecture hours a week for one semester. Students who have received a grade of C- or better in Mathematics 365C may not take Mathematics 361K. Prerequisite: Consent of the undergraduate adviser, or two of the following courses with a grade of at least C- in each: Mathematics 325K or Philosophy 313K, Mathematics 328K, Mathematics 341. Students who receive a grade of C- in one of the prerequisite courses are advised to take Mathematics 361K before attempting 365C. Students planning to take Mathematics 365C and 373K concurrently should consult a mathematics adviser.

#### M 365D. Real Analysis II.

Recommended for students planning to undertake graduate work in mathematics. A rigorous treatment of selected topics in real analysis, such as Lebesgue integration, or multivariate integration and differential forms. Three lecture hours a week for one semester. Prerequisite: Mathematics 365C with a grade of at least C-.

#### M 365G. Curves and Surfaces.

Calculus applied to curves and surfaces in three dimensions: curvature and torsion of space curves, Gauss map and curvature of surfaces, Gauss theorem, geodesics, and the Gauss-Bonnet theorem. Three lecture hours a week for one semester. Prerequisite: Credit with a grade of at least C- or registration for Mathematics 365C.

#### M 367K. Topology I.

An introduction to topology, including sets, functions, cardinal numbers, and the topology of metric spaces. Three lecture hours a week for one semester. Prerequisite: Mathematics 361K or 365C or consent of instructor.

#### M 367L. Topology II.

Various topics in topology, primarily of a geometric nature. Three lecture hours a week for one semester. Prerequisite: Mathematics 367K with a grade of at least C- or consent of instructor.

#### M 368K. Numerical Methods for Applications.

Continuation of Mathematics 348. Topics include splines, orthogonal polynomials and smoothing of data, iterative solution of systems of linear equations, approximation of eigenvalues, two-point-boundary value problems, numerical approximation of partial differential equations, signal processing, optimization, and Monte Carlo methods. Three lecture hours a week for one semester. Only one of the following may be counted: Computer Science 367, Mathematics 368K, Physics 329. Prerequisite: Mathematics 348 with a grade of at least C-.

#### M 371E. Learning Assistant Experience in Mathematics.

Students assist instructors and TAs in mathematics courses. This is a hands-on experience in what it is like to teach and support students in the learning of mathematics in undergraduate courses. Students must attend classroom training and discussions and work in Calculus discussion sections or undergraduate classrooms where mathematics is being taught. One class hour and three hours of fieldwork in an undergraduate mathematics course a week for one semester. Prerequisite: Mathematics 408C, 408K, 408N, 408R, or equivalent, and consent of instructor.

#### M 372. Fourier Series and Boundary Value Problems.

Discussion of differential equations of mathematical physics and representation of solutions by Green's functions and eigenfunction expansions. Three lecture hours a week for one semester. Prerequisite: Mathematics 427J or 427K with a grade of at least C-.

#### M 372K. Partial Differential Equations and Applications.

Partial differential equations as basic models of flows, diffusion, dispersion, and vibrations. Topics include first- and second-order partial differential equations and classification (particularly the wave, diffusion, and potential equations), and their origins in applications and properties of solutions. Includes the study of characteristics, maximum principles, Green's functions, eigenvalue problems, and Fourier expansion methods. Three lecture hours a week for one semester. Prerequisite: Mathematics 427J or 427K with a grade of at least C-.

#### M 373K. Algebraic Structures I.

A study of groups, rings, and fields, including structure theory of finite groups, isomorphism theorems, polynomial rings, and principal ideal domains. Three lecture hours a week for one semester. Students who have received a grade of C- or better in Mathematics 373K may not take Mathematics 343K. Prerequisite: Consent of the undergraduate adviser, or two of the following courses with a grade of at least C- in each: Mathematics 325K or Philosophy 313K, Mathematics 328K, Mathematics 341. Students who receive a grade of C- in one of the prerequisite courses are advised to take Mathematics 343K before attempting 373K. Students planning to take Mathematics 365C and 373K concurrently should consult a mathematics adviser.

#### M 373L. Algebraic Structures II.

Recommended for students planning to undertake graduate work in mathematics. Topics from vector spaces and modules, including direct sum decompositions, dual spaces, canonical forms, and multilinear algebra. Three lecture hours a week for one semester. Prerequisite: Mathematics 373K with a grade of at least C-.

#### M 374. Fourier and Laplace Transforms.

Operational properties and application of Laplace transforms; some properties of Fourier transforms. Three lecture hours a week for one semester. Prerequisite: Mathematics 427J or 427K with a grade of at least C-.

#### M 374G. Linear Regression Analysis.

Fitting of linear models to data by the method of least squares, choosing best subsets of predictors, and related materials. Three lecture hours a week for one semester. Prerequisite: Mathematics 358K or 378K with grade of at least C-, Mathematics 341 or 340L, and consent of instructor.

#### M 374K. Fourier and Laplace Transforms.

Continuation of Mathematics 374. Introduction to other integral transforms, such as Hankel, Laguerre, Mellin, Z. Three lecture hours a week for one semester. Prerequisite: Mathematics 374 with a grade of at least C-.

#### M 374M. Mathematical Modeling in Science and Engineering.

Tools for studying differential equations and optimization problems that arise in the engineering and physical sciences. Includes dimensional analysis and scaling, regular and singular perturbation methods, optimization and calculus of variations, and stability. Three lecture hours a week for one semester. Prerequisite: Mathematics 427J or 427K, and 340L or 341, with a grade of at least C- in each; and some basic programming skills.

#### M 175, 275, 375, 475. Conference Course.

Supervised study in mathematics, with hours to be arranged. May be repeated for credit. Prerequisite: Upper-division standing.

#### M 375C. Conference Course (Computer-Assisted).

Supervised study in mathematics on material requiring use of computing resources, with hours to be arranged. Conference course. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

## M 375D. Discovery: An Introduction to Advanced Study in Mathematics.

Capstone course designed primarily for UTeach pre-service mathematics majors considering discovery teaching methodology and/or graduate work in mathematics or mathematics education. Ties together foundational topics in the primary strands of mathematics present in a typical graduate mathematics program; included are selected topics from analysis, algebra, number theory, and topology. Three lecture hours a week for one semester. Mathematics 375D and 375T (Topic: Discovery: An Introduction to Advanced Study in Mathematics) may not both be counted. Prerequisite: Two proof-based mathematics courses with a grade of at least C-, or consent of instructor.

#### M 175S. Seminar in Instruction of Mathematics.

An exploration of subjects in mathematics instruction as taught at the secondary educational level. Practice learning and teaching through use of proofs, explorations, and connections. Subjects include foundational mathematics concepts, numbers, constructibility, and development of key mathematics topics. One lecture hour a week for one semester. Mathematics 175S and 175T may not both be counted. Offered on the letter-grade basis only. Prerequisite: Upper-division standing and consent of instructor.

#### M 175T, 275T, 375T, 475T. Topics in Mathematics.

One, two, three, or four lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites vary with the topic.

#### M 376C. Methods of Applied Mathematics.

Variational methods and related concepts from classical and modern applied mathematics. Models of conduction and vibration that lead to systems of linear equations and ordinary differential equations, eigenvalue problems, initial and boundary value problems for partial differential equations. Topics may include a selection from diagonalization of matrices, eigenfunctions and minimization, asymptotics of eigenvalues, separation of variables, generalized solutions, and approximation methods. Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Mathematics 427J or 427K, and 340L or 341, with a grade of at least C- in each.

#### M 378K. Introduction to Mathematical Statistics.

Same as Statistics and Data Sciences 378. Sampling distributions of statistics, estimation of parameters (confidence intervals, method of moments, maximum likelihood, comparison of estimators using mean square error and efficiency, sufficient statistics), hypothesis tests (p-values, power, likelihood ratio tests), and other topics. Three lecture hours a week for one semester. Only one the following may be counted: Mathematics 378K, Statistics and Data Sciences 378, Statistics and Scientific Computation 378. Prerequisite: Mathematics 362K with a grade of at least C-.

#### M 378N. Generalized Linear Models.

Extensions to ordinary least-squares regression, including Poisson regression, the lasso, mixed models, and ridge regression. Three lecture hours a week for one semester. Mathematics 375T (Topic: Generalized Linear Models) and 378N may not both be counted. Prerequisite: Mathematics 378K with a grade of at least C- or consent of instructor.

#### M 379H. Honors Tutorial Course.

Directed reading, research, and/or projects, under the supervision of a faculty member, leading to an honors thesis. Conference course. Prerequisite: Admission to the Mathematics Honors Program; Mathematics 365C, 367K, 373K, or 374G with a grade of at least A-, and another of these courses with a grade of at least B-; and consent of the honors adviser.

## Department of Molecular Biosciences

### **Biochemistry: BCH**

#### **Lower-Division Courses**

#### BCH 206K. Undergraduate Research.

Introduction to research practices; supervised individual undergraduate research in biochemistry. Six to ten laboratory hours a week for one semester. May be taken for a letter grade no more than twice. No more than six semester hours may be counted toward a degree in biochemistry. May be repeated for credit.

#### BCH 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Biochemistry.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Chemistry and Biochemistry. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### **Upper-Division Courses**

## BCH 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Biochemistry.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Chemistry and Biochemistry. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### BCH 339F. Foundations of Biochemistry.

Restricted to biochemistry majors. Metabolism of carbohydrates, lipids, amino acids, and nucleotides; structure and function of proteins. Three lecture hours a week for one semester. Only one of the following may be counted: Biochemistry 339F, 369, Biology 337 (Topic: Foundations of Biochemistry), Chemistry 339K, 369. Prerequisite: One of the following with a grade of at least C-: Chemistry 310M, 318M, 320M, or 328M.

#### BCH 339J. Chemical and Synthetic Biology.

Designed for students pursuing pharmaceutical and biotechnology careers. Topics include enzymatic reaction mechanisms and how they can be manipulated using tools from both chemistry and molecular biology. Three lecture hours a week for one semester. Only one of the following may be counted: Biochemistry 339J, Chemistry 339J, Systems and Synthetic Biology 339J. Prerequisite: Biochemistry 339F with a grade of at least C-.

#### BCH 339M. Structure and Function of Molecular Machines.

Function of proteins and protein complexes as machines in the cell, including the interaction of proteins with nucleic acids, synthesis of proteins, and degradation of proteins. Three lecture hours per week for one semester. Prerequisite: Biochemistry 339F with a grade of at least C-.

#### BCH 339N. Systems Biology and Bioinformatics.

Restricted to biochemistry majors. Understanding how the cell works as a system with emphasis on the methods used to gather and analyze data and develop/test models of systems level data. Three lecture hours a week for one semester. Only one of the following may be counted: Biochemistry 339N, 350, Biology 337 (Topic: Quantitative Analysis of Cellular and Molecular Biology), Chemical Engineering 337, 379 (Topic: Quantitative Analysis of Cellular and Molecular Biology), 381Q. Prerequisite: Biochemistry 339F, Computer Science 303E, and Statistics and Data Sciences 328M (or Statistics and Scientific Computation 318M, 328M) with a grade of at least C-.

## BCH 350. Quantitative Analysis of Cellular and Molecular Biology.

Study of biological fundamentals using quantitative chemical engineering approaches for students with an engineering or life sciences background. Analysis of biological systems from stoichiometric, thermodynamic, and kinetic perspectives. Investigation of how these principles are used to understand disease, control cellular behavior, and design protein-based therapeutics through case studies. Three lecture hours a week for one semester. Only one of the following may be counted: Biochemistry 350, 339N, Biology 337 (Topic: Quantitative Analysis of Cellular and Molecular Biology), Chemical Engineering 337, 379 (Topic: Quantitative Analysis of Cellular and Molecular Biology), 381Q. Prerequisite: Biochemistry 339F or 369 with a grade of C- or better.

#### BCH 364C. Bioinformatics.

Restricted to biochemistry majors. Subjects include physical methods for the study of macromolecules, chemistry of proteins, enzyme chemistry, regulatory mechanisms for gene expression, and proteinnucleic acid interactions. Three lecture hours a week for one semester. Only one of the following may be counted: Biochemistry 364C, Chemistry 364C, Systems and Synthetic Biology 364C. Prerequisite: Biochemistry 339F with a grade of at least B; Statistics and Data Sciences 328M (or Statistics and Scientific Computation 318M, 328M) with a grade of at least C-; and consent of the instructor.

#### BCH 364D. Macromolecular Structure Determination.

Restricted to biochemistry majors. Emphasis on X-ray crystallography and nuclear magnetic resonance (NMR) spectroscopy of proteins. Investigation of theories and practices of the most relevant techniques in macromolecular structure determination. Use of the X-ray and NMR facilities to collect data that is used to solve protein structures. Three lecture hours a week for one semester. Biochemistry 364D and Chemistry 364D may not both be counted. Prerequisite: Biochemistry 339F and 370 with a grade of at least B.

#### BCH 364E. Systems Biology.

Restricted to biochemistry majors. Survey of current high-throughput technologies and computational methods for generating data and integrating information at all levels of biological organization. Emphasis on how hypotheses can be generated and tested with these techniques to better understand how model organisms function and evolve. Three lecture hours a week for one semester. Biochemistry 364E and Chemistry 364E may not both be counted. Prerequisite: Biochemistry 339F with a grade of at least B and consent of instructor.

#### BCH 364F. Astrobiology.

Restricted to biochemistry majors. An overview of the science used in the search for extraterrestrial life, life origins, earth history, evolution, metabolism of extremophiles, biochemistry, and astronomy. Three lecture hours a week for one semester. Biochemistry 364F and Chemistry 364F may not both be counted. Prerequisite: Biochemistry 339F with a grade of at least B and consent of instructor.

## BCH 365D. Structure and Function of Proteins and Nucleic Acids.

Restricted to biochemistry majors. Exploration of the structures and functions of proteins and nucleic acids, utilizing quantitative methods to

evaluate the roles of structural features in function, and developing new ways of thinking about the dynamics of macromolecules. Three lecture hours a week for one semester. Biochemistry 365D and Chemistry 365D may not both be counted. Prerequisite: Biochemistry 339F and 370 with a grade of at least B.

#### BCH 369. Fundamentals of Biochemistry.

The basics of protein structure and function, carbon and nitrogen metabolism, and molecular biology of macromolecules. Three lecture hours a week for one semester. Only one of the following may be counted: Biochemistry 339F, 369, Biology 337 (Topic: Foundations of Biochemistry), Chemistry 339K, 369. May not be counted toward a degree in biochemistry. Prerequisite: One of the following with a grade of at least C-: Chemistry 310M, 318M, 320M, or 328M.

#### BCH 369K. Techniques of Research.

Advanced laboratory practice and introduction to research. One lecture hour and six laboratory hours a week for one semester. May be taken for a letter grade no more than twice. No more than six semester hours may be counted toward a degree in biochemistry. May be repeated for credit. Prerequisite: Six semester hours of upper-division coursework in biochemistry or chemistry, or five semester hours of coursework in organic chemistry, or consent of the undergraduate faculty adviser in biochemistry.

#### BCH 369L. Biochemistry Laboratory.

An introduction to modern fundamental techniques of biochemistry. Two lecture hours and seven laboratory hours a week for one semester. Biochemistry 369L and Chemistry 369L may not both be counted. Prerequisite: Biochemistry 339F with a grade of at least C-.

#### BCH 369T. Biotechnology Laboratory.

Advanced techniques in biotechnology. Nine laboratory hours a week for one semester. Biochemistry 369T and Chemistry 369T may not both be counted. Prerequisite: Consent of instructor.

#### BCH 370. Physical Methods of Biochemistry.

Theory of electrophoresis, ultracentrifugation, spectroscopy, electron microscopy, and diffraction as applied to biological macromolecules. Three lecture hours a week for one semester. Biochemistry 370 and Chemistry 370 may not both be counted. Prerequisite: Biochemistry 339F with a grade of at least C-.

#### BCH 379H, 679H. Biochemistry Honors Tutorial Course.

Laboratory research project in a specific field of biochemistry under the supervision of one or more faculty members. Conference course. May be repeated once for credit. Must be taken in addition to the required hours for a degree in biochemistry. Students must enroll no later than the first semester of the year of graduation. May be repeated for credit. Prerequisite: Consent of the research supervisor and the departmental honors adviser.

## **Neuroscience Program**

### Neuroscience: NEU Lower-Division Courses Upper-Division Courses NEU 330. Neural Systems I.

Introduction to the nervous system with an emphasis on brain organization, neuron physiology, perceptual systems, and motor systems. Intended for neuroscience majors and those considering neuroscience as a major. Three lecture hours a week for one semester. Only one of the following may be counted: Biology 337 (Topic: Neural Systems I), 365R, 371M, Neuroscience 330, 365R, 371M.

#### NEU 335. Neural Systems II.

Introduction to the nervous system with an emphasis on neural development and on the neural mechanisms of memory, emotions, and other higher cognitive functions. Intended for neuroscience majors and those considering neuroscience as a major. Three lecture hours a week for one semester. Biology 337 (Topic: Neural Systems II) and Neuroscience 335 may not both be counted. Prerequisite: Credit or registration in Physics 303L, 316, or 317L; and a grade of at least C- in the following: Biology 206L, and 311D or 325H, and Mathematics 408C or 408S, and Neuroscience 330.

#### NEU 137, 237, 337, 437. Selected Topics in Neuroscience.

Topics include recent developments and research methods in the field of neuroscience. For each semester hour of credit earned, one lecture hour a week for one semester. Some topics may require additional hours. May be repeated for credit when the topics vary. Neuroscience 335 with a grade of at least B-; additional prerequisites vary with the topic.

#### NEU 365D. Principles of Drug Action.

Introduction to the basic principles of pharmacology; including how drugs get into the body, exert their actions, and are metabolized and excreted. Three lecture hours a week for one semester. Biology 365D (Topic: Principles of Drug Action) and Neuroscience 365D may not both be counted. Prerequisite: Neuroscience 335 with a grade of at least C-.

#### NEU 365L. Neurobiology Laboratory.

An introduction to physiological, morphological, and molecular techniques used for analysis of the nervous system. Experiments and computer simulations illustrate basics of information processing by the nervous system. Four laboratory hours and one discussion hour a week for one semester. Biology 365L (Topic: Neurobiology Laboratory) and Neuroscience 365L may not both be counted. Prerequisite: Neuroscience 335 with a grade of at least C-.

#### NEU 365T. Neurobiology of Disease.

The neurobiological basis of disorders of the brain, with the main focus on mental illness. Emphasizes the neural circuitries and neurochemical events that underlie specific mental processes and behaviors. Three lecture hours a week for one semester. Biology 365T and Neuroscience 365T may not both be counted. Prerequisite: Neuroscience 335 with a grade of at least C-.

#### NEU 365W. Neurobiology of Addiction.

Study of the neurobiology of neurotransmitters, and the influence of alcohol and drugs of abuse on neurotransmitters. Three lecture hours a week for one semester. Biology 365W and Neuroscience 365W may not both be counted. Prerequisite: Neuroscience 335 with a grade of at least C-.

## NEU 366C. Ion Channels and the Molecular Physiology of Neuronal Signaling.

Explores the role of molecular conformational changes in higher-level neuronal function and sensory transduction, including the generation and regulation of diverse types of neuronal signaling characteristics. Emphasizes a quantitative approach and the use of models to study function. Three lecture hours a week for one semester. Only one of the following may be counted: Biology 337 (Topic: Ion Channels and the Molecular Physiology of Neuronal Signaling), 366C, Neuroscience 366C. Prerequisite: Neuroscience 335 with a grade of at least C-.

#### NEU 366D. Synaptic Physiology and Plasticity.

Detailed study of the physiology of synaptic transmission in the mammalian central nervous system. Covers dendritic integration and various forms and mechanisms of synaptic plasticity. Three lecture hours a week for one semester. Only one of the following may be counted: Biology 337 (Topic: Synaptic Physiology and Plasticity in the Central Nervous System), 366D, Neuroscience 366D. Prerequisite: Neuroscience 335 with a grade of at least C-.

#### NEU 366E. Visual Neuroscience.

Physiology of the visual pathway and its relationship to visual perception; prospects for prevention of blinding eye diseases; functional and ecological adaptations of primate vision. Laboratory experiments and demonstrations illustrate and extend lecture topics and include measurement of several aspects of students' own visual and sensorimotor function. One and one-half lecture hours and three laboratory hours a week for one semester. Only one of the following may be counted: Biology 337 (Topic: Visual Neuroscience), 366E, 366P, Neuroscience 366E, 366P. Prerequisite: Biomedical Engineering 365R or Neuroscience 335 with a grade of at least C-.

#### NEU 466G. Functional and Synaptic Neuroanatomy.

Neuroanatomy and function of synapses as a basis for brain function and behavior. Examine the ultrastructure and function of synapses, dendrites and axons underlying basic synaptic transmission and plasticity. Laboratory projects involve three-dimensional reconstructions from serial section electron microscopy. Three lecture hours and oneand-one-half laboratory hours a week for one semester. Only one of the following may be counted: Biology 337 (Topic: Neurobiology of Synaptic Circuits), 337 (Topic: Human Neuroanatomy), 366F, Neuroscience 466G. Prerequisite: Neuroscience 335 with a grade of at least C-.

#### NEU 366L. Neuroimaging Laboratory.

Basic principles of image formation and techniques of fluorescent imaging and confocal laser-scanning microscopy. Includes image processing and analysis to extract quantitative information from digital images. Survey of imaging techniques, including electron microscopy and functional MRI. One lecture hour and four laboratory hours a week for one semester. Only one of the following may be counted: Biology 337 (Topic: Microscopy and Fluorescence Imaging Laboratory), 366L, Neuroscience 366L. Prerequisite: Neuroscience 335 with a grade of at least C-.

#### NEU 466M. Quantitative Methods In Neuroscience I.

Overview of the basic mathematical and computational tools central to the analysis of neural systems in a laboratory setting. Subjects include linear algebra, differential equations, filtering, correlation, probability, and inference, with an emphasis on quantitative methodology and applications to neuroscience. Three lecture hours and one and one-half laboratory hours a week for one semester. Prerequisite: Mathematics 408D or 408M, and Neuroscience 335 with a grade of at least C- in each.

#### NEU 366N. Quantitative Methods in Neuroscience II.

Continuation of Neuroscience 466M. Introduction to basic mathematical and computational tools for the analysis of neural systems. Subjects include computational and quantitative methods, with an emphasis on their applications to neuroscience. Three lecture hours and one laboratory hour a week for one semester. Biology 366N and Neuroscience 366N may not both be counted. Prerequisite: Neuroscience 466M with a grade of at least C-.

#### NEU 366P. Laboratory in Psychophysics.

Studies the principles of experimental design, execution, and interpretation by having students measure their own perceptual and behavioral responses to visual and auditory tests. Includes data analysis,

statistical significance, and interpretation. Five laboratory hours a week for one semester. Only one of the following may be counted: Biology 337 (Topic: Visual Neuroscience), 366E, 366P, Neuroscience 366E, 366P. Prerequisite: Neuroscience 335 with a grade of at least C-.

## NEU 366S. Neuromolecular Genetics and Disease Laboratory.

Explores techniques used to study the molecular genetic basis for nervous system function and disease with a powerful invertebrate model system. Subjects will range from studying the conserved molecular basis for our senses and male/female-specific behaviors, to exploring how mutations of conserved neural genes cause neurological disorders, such as Parkinson's disease and Alzheimer's disease. Six laboratory hours a week for one semester Biology 366S and Neuroscience 366S may not both be counted. Prerequisite: Neuroscience 335 with a grade of at least C-.

#### NEU 367F. Foundations of Human Neuroimaging.

Survey of methods for neuroimaging research. Describes the physics of MRI image acquisition, the physiology of neural responses, and the design and analysis of MRI studies. Three lecture hours a week for one semester. Only one of the following may be counted: Biology 337 (Topic: Foundations of Human Neuroimaging), 367F, Neuroscience 367F. Prerequisite: Neuroscience 330 or 365R (or Biology 365R) with a grade of at least C-.

#### NEU 367V. Evolutionary Neurobiology.

Examination of the nervous system in an evolutionary context. Three lecture hours a week for one semester. Only one of the following may be counted: Biology 337 (Topic: Evolutionary Neurobiology), 367V, Neuroscience 367V. Prerequisite: Biology 325 or 325H with a grade of at least C-.

#### NEU 367W. Laboratory in Behavioral Neuroscience.

Behavioral experiments with rodents aimed at elucidating the neural mechanisms of psychological processes such as memory, anxiety, and incentive motivation. One lecture hour and five laboratory hours a week for one semester. Biology 367W and Neuroscience 367W may not both be counted. Prerequisite: Neuroscience 335 with a grade of at least C-.

#### NEU 371M. Comparative Neuroscience.

The nervous system, with emphasis on vertebrate neurobiology. Three lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Biology 337 (Topic: Neural Systems I), 365R, 371M, Neuroscience 330, 365R, 371M. Prerequisite: Neuroscience 335 with a grade of at least C-.

#### NEU 177, 277, 377, 477. Undergraduate Research.

Laboratory or research in the various fields of neuroscience under the supervision of one or more faculty members. Supervised individual research. Up to three semester hours may be counted toward the major requirement for the Bachelor of Science in Neuroscience. May be repeated for credit. Prerequisite: Neuroscience 335 with a grade of at least C-.

#### NEU 179H, 279H, 379H. Honors Tutorial Course.

Restricted to students in the honors program in neuroscience. Original laboratory research project under the direction of a faculty mentor leading to a thesis or research presentation. The equivalent of one, two, or three lecture hours a week for one semester. May be repeated for credit, but no more than six hours may be counted toward a degree in neuroscience. Prerequisite: Consent of student's research supervisor and the departmental honors adviser.

## **Department of Physics**

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

### **Physical Science: P S**

### **Lower-Division Courses**

## P S 303. Introductory Physical Science I: Mechanics and Heat.

Restricted to students outside the College of Natural Sciences. Inquiry laboratory approach to basic concepts of measurement, forces, motion, energy, temperature, and heat. Designed for students with minimum prior preparation in mathematics and physics. Especially appropriate for prospective elementary school teachers. Four hours of integrated laboratory and lecture a week for one semester. Only one of the following may be counted: Physical Science 303, Physics 301, 302K, 303K, 309K, 317K.

## P S 304. Introductory Physical Science II: Electricity, Light, and Optics.

Restricted to students outside the College of Natural Sciences. Inquiry laboratory approach to electricity, magnetism, waves, light, and optical instruments. Four hours of integrated laboratory and lecture a week for one semester. Only one of the following may be counted: Physical Science 304, Physics 302L, 303L, 309L, 316, 317L. Prerequisite: Physical Science 303.

### **Upper-Division Courses**

## P S 350. Physical Science for Elementary and Middle School Teachers.

Designed for kindergarten through sixth grade teachers with minimal preparation in mathematics (college algebra) and no preparation in physics. An inquiry laboratory in the basic concepts of light, electricity, and magnetism. Three hours of integrated laboratory and lecture a day for three weeks.

#### P S 367M. Physical Science: Methods of Astronomy.

Same as Astronomy 367M. An introductory, self-paced course in the methods of astronomy that emphasizes learning astronomical principles through observations. Six laboratory hours a week for one semester. May not be counted toward the Bachelor of Arts, Plan I, degree with a major in astronomy. Prerequisite: Upper-division standing and nine semester hours of coursework in mathematics and/or science, including one of the following: Physical Science 303, 304, Astronomy 301, 302, 303. Equivalent preparation in mathematics, physics, chemistry, or earth sciences may be substituted with written approval of the instructor.

#### P S 375. Individual Study in Physical Science.

Intended primarily for preservice and in-service teachers. Guided inquiry reading or laboratory research in physical science. Meets three times a week for one semester, for one hour each meeting. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing and written consent of instructor.

## Physics: PHY Lower-Division Courses

#### PHY 301. Mechanics.

Designed for students who intend to major in science or mathematics. Three lecture hours a week for one semester. Only one of the following may be counted: Physical Science 303, Physics 301, 302K, 303K, 309K, 317K. Prerequisite: Credit with a grade of at least C- or registration in Mathematics 408D, 408L, or 408S, and Physics 101L; and an appropriate score on the physics assessment exam.

#### PHY 101L. Laboratory for Physics 301.

Three laboratory hours a week for one semester. Only one of the following may be counted without prior approval of the department: Physics 101L, 102M, 103M, 117M. May not be counted toward a degree unless prerequisite is observed. Prerequisite: Credit with a grade of at least C- or registration for Physics 301.

## PHY 302K (TCCN: PHYS 1301). General Physics Technical Course: Mechanics, Heat, and Sound.

Noncalculus technical course in physics. Completion of high school trigonometry or Mathematics 305G is highly recommended. Three lecture hours a week for one semester. Only one of the following may be counted: Physical Science 303, Physics 301, 302K, 303K, 309K, 317K. Prerequisite: Credit with a grade of at least C- or registration for Physics 102M.

#### PHY 302L (TCCN: PHYS 1302). General Physics Technical Course: Electricity and Magnetism, Light, Atomic and Nuclear Physics.

Noncalculus technical course in physics. Three lecture hours a week for one semester. Only one of the following may be counted: Physical Science 304, Physics 302L, 303L, 309L, 316, 317L. Prerequisite: Credit with a grade of at least C- in Physics 302K and 102M; credit with a grade of at least C- or registration in Physics 102N.

#### PHY 102M (TCCN: PHYS 1101). Laboratory for Physics 302K.

Two laboratory hours a week for one semester. Only one of the following may be counted without prior approval of the department: Physics 101L, 102M, 103M, 117M. May not be counted toward a degree unless prerequisite is observed. Prerequisite: Credit with a grade of at least C- or registration for Physics 302K.

#### PHY 102N (TCCN: PHYS 1102). Laboratory for Physics 302L.

Two laboratory hours a week for one semester. Only one of the following may be counted without prior approval of the department: Physics 102N, 103N, 116L, 117N. May not be counted toward a degree unless prerequisite is observed. Prerequisite: Credit with a grade of at least C- or registration for Physics 302L.

#### PHY 303K (TCCN: PHYS 2325). Engineering Physics I.

A general survey of physics; primarily laws of motion, heat, and wave phenomena. Three lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Physical Science 303, Physics 301, 302K, 303K, 309K, 317K. Prerequisite: Credit with a grade of at least C- or registration in Mathematics 408D, 408L, or 408S, and Physics 103M; and an appropriate score on the physics assessment exam.

#### PHY 303L (TCCN: PHYS 2326). Engineering Physics II.

Electricity and magnetism, optics, and atomic phenomena. Three lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Physical Science 304, Physics 302L, 303L, 309L, 316, 317L. Prerequisite: Physics 303K and 103M with a grade of at least C- in each; credit with a grade of at least C- or registration in Mathematics 408D or 408M, and Physics 103N.

#### PHY 103M (TCCN: PHYS 2125). Laboratory for Physics 303K.

Two laboratory hours a week for one semester. Only one of the following may be counted: Physics 101L, 102M, 103M, 117M. May not be counted

toward a degree unless prerequisite is observed. Prerequisite: Credit with a grade of at least C- or registration for Physics 303K.

#### PHY 103N (TCCN: PHYS 2126). Laboratory for Physics 303L.

Two laboratory hours and one discussion hour a week for one semester. Only one of the following may be counted: Physics 102N, 103N, 116L, 117N. May not be counted toward a degree unless prerequisite is observed. Prerequisite: Credit with a grade of at least C- or registration for Physics 303L.

#### PHY 104. Introductory Physics Seminar.

Suggested for beginning physics majors. Discussion of the development of important ideas in physics, with emphasis on their relevance to contemporary research. One lecture hour a week for one semester. Offered on the pass/fail basis only.

#### PHY 306. Elementary Physics Methods.

Designed for students who have not had high school physics, have weak problem-solving skills, and need preparation for Physics 301 or 303K. Three lecture hours a week for one semester. May not be counted toward any degree. Prerequisite: High school trigonometry or Mathematics 305G.

#### PHY 108. Introduction to Research.

Introductory laboratory experience; use of tools and test equipment; beginning apprenticeship in active physics research. One class hour a week for one semester. May be repeated for credit. Offered on the pass/ fail basis only. Prerequisite: Consent of instructor and approval of an undergraduate adviser.

#### PHY 308F. Introduction to Research.

Introductory laboratory experience; use of tools and test equipment; beginning apprenticeship in active physics research. One lecture hour and eight laboratory hours a week for one semester. Prerequisite: Consent of instructor and the undergraduate adviser.

## PHY 309K (TCCN: PHYS 1305). Elementary Physics for Nontechnical Students.

Mechanics, heat, and sound. Designed for students who do not intend to do further work in natural sciences, engineering, mathematics, or medicine. Three lecture hours a week for one semester. Only one of the following may be counted: Physical Science 303, Physics 301, 302K, 303K, 309K, 317K. May not be counted toward a degree in the College of Natural Sciences.

## PHY 309L (TCCN: PHYS 1307). Elementary Physics for Nontechnical Students.

Electricity and magnetism, light, atomic and nuclear physics. Designed for students who do not intend to do further work in natural sciences, engineering, mathematics, or medicine. Three lecture hours a week for one semester. Only one of the following may be counted: Physical Science 304, Physics 302L, 303L, 309L, 316, 317L. May not be counted toward a degree in the College of Natural Sciences. Prerequisite: Physics 309K with a grade of at least C-.

#### PHY 110C. Conference Course.

Supervised study of selected topics in physics, by individual arrangement with department and instructor. Conference course. May be repeated for credit when the topics vary. Offered on the pass/fail basis only. Prerequisite: Written consent of instructor.

#### PHY 315. Wave Motion and Optics.

Study of general properties of waves; examples include sound, electromagnetic, and mechanical waves; special emphasis on light and optics. Three lecture hours a week for one semester. Prerequisite: The following coursework with a grade of at least C- in each: Mathematics 427J or 427K; Physics 316 and 116L; and credit with a grade of at least C- or registration for Physics 115L.

#### PHY 115L. Laboratory for Physics 315.

Three laboratory hours a week for one semester. May not be counted toward a degree unless prerequisite is observed. Prerequisite: Credit with a grade of at least C- or registration for Physics 315.

#### PHY 316. Electricity and Magnetism.

Three lecture hours a week for one semester. Only one of the following may be counted: Physical Science 304, Physics 302L, 303L, 309L, 316, 317L. Prerequisite: Physics 301 and 101L with a grade of at least C- in each; credit with a grade of at least C- or registration in Mathematics 408D or 408M, and Physics 116L.

#### PHY 116L. Laboratory for Physics 316.

Three laboratory hours a week for one semester. Only one of the following may be counted without prior approval of the department: Physics 102N, 103N, 116L, 117N. May not be counted toward a degree unless prerequisite is observed. Prerequisite: Credit with a grade of at least C- or registration for Physics 316.

#### PHY 317K. General Physics I.

Mechanics, heat, and sound, with biomedical applications. An introductory course designed and recommended primarily for premedical students and others in the biomedical sciences whose professional or preprofessional training includes an introductory course in calculus. Satisfies most medical and dental school requirements for physics. Three lecture hours a week for one semester. Only one of the following may be counted: Physical Science 303, Physics 301, 302K, 303K, 309K, 317K. May not be counted toward the Bachelor of Science in Astronomy or Bachelor of Science in Physics. Prerequisite: Credit with a grade of at least C- in Mathematics 408C or 408R; or credit with a grade of at least C- in 408K or 408N and registration for 408L or 408S; and credit with a grade of at least C- or registration for Physics 117M.

#### PHY 317L. General Physics II.

Electricity and magnetism, light, atomic and molecular physics, nuclear physics, and their biomedical applications. Designed and recommended primarily for premedical students and others in the biomedical sciences whose professional or preprofessional training includes an introductory course in calculus. Satisfies most medical and dental school requirements for physics. Three lecture hours a week for one semester. Only one of the following may be counted: Physical Science 304, Physics 302L, 303L, 309L, 316, 317L. May not be counted toward the Bachelor of Science in Astronomy or Bachelor of Science in Physics. Prerequisite: Physics 317K and 117M with a grade of at least C-; and credit with a grade of at least C- or registration in Physics 117N.

#### PHY 117M. Laboratory for Physics 317K.

Three laboratory hours a week for one semester. Only one of the following may be counted without prior approval of the department: Physics 101L, 102M, 103M, 117M. Prerequisite: Credit with a grade of at least C- or registration for Physics 317K.

#### PHY 117N. Laboratory for Physics 317L.

Three laboratory hours a week for one semester. Only one of the following may be counted without prior approval of the department: Physics 102N, 103N, 116L, 117N. Prerequisite: Credit with a grade of at least C- or registration for Physics 317L.

#### PHY 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S. Topics in Physics.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Physics. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### PHY 321. Modern Physics: Plan II.

Restricted to Plan II students. Conceptual foundations of modern physics. Examines quantum mechanics, quantum field theory, relativity, and general relativity, including large-scale structure and cosmology; and the development of analytic problem-solving skills, including estimation. Three lecture hours a week for one semester. Prerequisite: Upper-division standing.

#### PHY 329. Introduction to Computational Physics.

Computational methods for problem solving and research in physics; numerical analysis and computer simulation methods for physics applications using different types of computers. Three lecture hours a week for one semester. Only one of the following may be counted: Computer Science 367, Mathematics 368K, Physics 329. Prerequisite: The following coursework with a grade of at least C- in each: Physics 315 and 115L; a programming course at the level of Computer Science 303E with a grade of at least C- or consent of instructor; and credit with a grade of at least C- or registration for Mathematics 341 or 340L.

## PHY 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S. Topics in Physics.

This course is used to record credit the student earns while enrolled at another institution in a program administered by the University's Study Abroad Office. Credit is recorded as assigned by the study abroad adviser in the Department of Physics. University credit is awarded for work in an exchange program; it may be counted as coursework taken in residence. Transfer credit is awarded for work in an affiliated studies program. May be repeated for credit when the topics vary.

#### PHY 329W. Cooperative Physics.

Covers the work period of physics students in the Cooperative Education Program, which provides supervised work experience by arrangement with the employer and the supervising instructor. Forty laboratory hours a week for one semester. The student must repeat the course each work period and must take it twice to receive credit toward the degree; at least one of these registrations must be during a long-session semester. No more than three semester hours may be counted toward the major requirement; no more than six semester hours may be counted toward the degree. The student's first registration must be on the pass/fail basis. Prerequisite: Membership application to the Cooperative Physics Program, Physics 316 with a grade of at least C-, and consent of the undergraduate adviser.

#### PHY 333. Modern Optics.

Review of geometrical optics, polarization, interference, and optical instruments. Subjects include Fourier optics, light propagation in fibers, quantum optics, and coherence. Three lecture hours a week for one semester. Prerequisite: The following coursework with a grade of at least C- in each: Mathematics 427J or 427K, Physics 315, and 115L.

#### PHY 133L. Laboratory for Physics 333.

Three laboratory hours a week for one semester. Prerequisite: Credit with a grade of at least C- or registration for Physics 333.

#### PHY 336K. Classical Dynamics.

Elementary linear vector algebra, Newtonian mechanics, Lagrangian mechanics, central force motion, dynamics of rigid bodies, and theory of small oscillations. Three lecture hours a week for one semester. Prerequisite: The following coursework with a grade of at least C- in each: Mathematics 427L or 364K, Physics 315, and 115L.

#### PHY 336L. Fluid Dynamics.

Fundamental concepts of fluid mechanics developed and applied to laminar and turbulent flows. Subjects include the Navier-Stokes equations, pipe and channel flow, drag, boundary layers, convection, and rotating fluids. Three lecture hours a week for one semester. Prerequisite: Physics 336K with a grade of at least C-.

#### PHY 338K. Electronic Techniques.

Elementary circuit theory, amplifiers, feedback, pulse and digital techniques, signal processing, and microprocessors as applied to physics instrumentation. One and one-half lecture hours and three laboratory hours a week for one semester. Prerequisite: The following coursework with a grade of at least C- in each: Mathematics 427J or 427K, Physics 316, and 116L.

#### PHY 341. Selected Topics in Physics.

Three lecture hours a week for one semester. An additional one-hour problem session is required for some sections. May not be counted toward the Bachelor of Science in Physics degree without prior approval of the department. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing, three semester hours of coursework in a natural science, and three semester hours of coursework in mathematics.

**Topic 1: Energy Production.** The various means that exist or have been suggested for generating energy; comparison in terms of efficiency, safety, and effects on the environment.

Topic 2: Great Men, Moments, and Ideas. How our views of matter, energy, and the universe developed.

**Topic 3: Musical Acoustics.** Study of the production, transmission, and perception of the special kind of sound called music, based on the application of elementary principles of physics.

**Topic 4: The Nature of Things.** A qualitative survey of all of physics, from falling bodies to quarks, making heavy use of classroom demonstrations.

**Topic 5: Pseudoscience.** Study of a variety of ideas treated very seriously by the communications media but having no basis in fact, including astrology, extrasensory perception, and flying saucers; why such areas are not part of science.

Topic 6: Writing.

Topic 7: Research Methods: UTeach.

#### PHY 345. Biophysics.

Basic concepts of physics developed and applied to biological systems. Subjects include energy in living systems, entropic interactions, molecular forces and self-assembly, biopolymers, bio-membranes, cellcell interactions, pattern formation, collective behavior, higher order systems, population dynamics and evolution. Three lecture hours a week for one semester. Prerequisite: Upper-division standing, and the following coursework with a grade of at least C- in each: Biology 311D, Chemistry 302, and Physics 355.

#### PHY 352K. Classical Electrodynamics I.

Electrostatic fields, magnetostatic fields, derivation of Green's theorems and functions and of Maxwell's equations. Three lecture hours a week for one semester. Prerequisite: The following coursework with a grade of at least C- in each: Mathematics 427L or 364K, Physics 315, and 115L.

#### PHY 352L. Classical Electrodynamics II.

A continuation of Physics 352K, emphasis is placed on conservation laws, electromagnetic waves, potentials and fields, radiation, and Lorentz invariance. One or more special subjects, such as Rayleigh scattering and energy loss by relativistic charged particles in matter will be developed. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Physics 352K with a grade of at least C-.

#### PHY 353L. Modern Physics Laboratory.

Laboratory experiments investigating the breakdown of classical physics for microscopic phenomena. Includes absorption and emission spectra, the photoelectric effect, blackbody radiation, the Compton effect, X-ray diffraction, and other experiments in modern physics. Four and one-half laboratory hours a week for one semester. Prerequisite: The following coursework with a grade of at least C- in each: Physics 315 and 115L.

#### PHY 355. Modern Physics and Thermodynamics.

Introduction to modern physics and thermodynamics: photons (spectra, photoelectric effect, blackbody radiation, Compton effect), atoms (Rutherford, Bohr), matter waves (Planck, deBroglie, probability interpretation, Schroedinger), nuclei, particles, special relativity, the laws of thermodynamics, and statistical physics. Three lecture hours a week for one semester. Prerequisite: Physics 303L or 316 with a grade of at least C-.

#### PHY 362K. Quantum Physics II: Atoms and Molecules.

The two-electron atom; spin and statistics; coupling schemes for manyelectron atoms; atoms and the radiation field; perturbation methods for decay and collisions; thermal, electrical, and magnetic properties of solids; and free-electron metal and band theory. May include subjects such as superconductivity, Josephson tunneling, and others. Three lecture hours a week for one semester. Prerequisite: Physics 373 with a grade of at least C-.

#### PHY 362L. Quantum Physics III: Particles and Nuclei.

Nuclei and nucleons, their gross properties; the hadrons; symmetries and conservation laws; nuclear stability; electromagnetic, weak, and hadronic interactions; nuclear reactions at low, medium, and high energies; nucleon structure; tools of experimental nuclear physics; models of theoretical nuclear physics; nuclear technology. Three lecture hours a week for one semester. Prerequisite: Physics 373 with a grade of at least C-; Physics 362K is recommended.

#### PHY 369. Thermodynamics and Statistical Mechanics.

Basic concepts of thermal physics; entropy, enthalpy, free energy, phase transitions, equilibrium distribution functions, applications. Three lecture hours a week for one semester. Prerequisite: Credit with a grade of at least C- or registration for Physics 373.

#### PHY 670T. Senior Thesis.

Individual research with faculty supervision. First half involves preparation of proposal; second involves completion of written thesis. Six hours of work a week for one semester, or three hours of work a week for two semesters. Only three semester hours may be counted toward the Bachelor of Science in Physics degree. Prerequisite: Upperdivision standing and nine semester hours of upper-division coursework in physics.

#### PHY 371C. Individual Study in Physics.

Supervised reading or research in physics. Hours to be arranged. May be repeated for credit. Prerequisite: Upper-division standing; Physics 336K with a grade of at least C-; credit with a grade of at least C- or registration for Physics 352K; and consent of the undergraduate adviser.

#### PHY 373. Quantum Physics I: Foundations.

Postulates of quantum mechanics, the bound states of the finite square well, the harmonic oscillator, operator-eigenvalue formulism and selected examples, the hydrogen atom, angular momentum, rigid rotor, and spin. May include simple scattering theory. Three lecture hours a week for one semester. Prerequisite: The following coursework with a grade of at least C- in each: Physics 336K, 353L, and 355.

#### PHY 474. Advanced Laboratory I.

Modern experimental techniques, theory of error, and analysis of experiments; both modern and classical experiments in atomic and nuclear physics, electricity and magnetism, optics and heat. Three lecture hours and eight laboratory hours a week for one semester, with additional laboratory hours to be arranged. With consent of instructor, may be repeated for credit. Prerequisite: Physics 352K, 353L, and 355; or consent of the undergraduate adviser. Physics 338K is recommended.

#### PHY 375P. Introductory Plasma Physics.

Orbit theory and drifts, introduction to plasma stability and waves, applications to plasma confinement and heating. Three lecture hours a week for one semester. Prerequisite: The following coursework with a grade of at least C- in each: Physics 352K and 369.

#### PHY 375R. Introduction to Relativity.

Overview of the special and general theories of relativity, with emphasis on recent developments in gravitation. Three lecture hours a week for one semester. Prerequisite: Physics 352K with a grade of at least C-.

#### PHY 375S. Introductory Solid-State Physics.

Crystal structure, classification of solids, cohesion, thermal and electrical properties of solids, magnetic properties of solids, imperfections. Three lecture hours a week for one semester. Prerequisite: The following coursework with a grade of at least C- in each: Physics 369 and 373.

#### PHY 379H. Honors Tutorial Course.

Research project, resulting in a thesis, for outstanding students electing to take the honors program in physics. Conference course. Prerequisite: A University grade point average of at least 3.00, a grade point average in physics of at least 3.50, twelve semester hours of upper-division coursework in physics, and consent of the student's research supervisor and the departmental honors adviser.

# Division of Statistics and Data Sciences

### **Statistics and Data Sciences: SDS**

#### **Lower-Division Courses**

#### SDS 301. Elementary Statistical Methods.

Covers the fundamental procedures for data organization and analysis. Subjects include frequency distributions, graphical presentation, sampling, experimental design, inference, and regression. Three lecture hours a week for one semester. Only one of the following may be counted: Educational Psychology 371, Mathematics 316, Statistics 309 or Statistics and Data Sciences 301. A student may not earn credit for Educational Psychology 371, Mathematics 316, Statistics 309 or Statistics and Data Sciences 301 after having received credit for any of the following with a grade of at least C-: Statistics and Data Sciences 302, 303, 304, 305, 306, 328M, Statistics and Scientific Computation 302, 303, 304, 305, 306, or 328M.

#### SDS 302. Data Analysis for the Health Sciences.

Basic probability and data analysis for the sciences. Subjects include randomness, sampling, distributions, probability models, inference,

regression, and nonlinear curve fitting. Three lecture hours and one laboratory hour a week for one semester. Only one of the following may be counted: Statistics and Data Sciences 302, 303, 304, 305, 306, 328M, Statistics and Scientific Computation 302, 303, 304, 305, 306, 328M.

#### SDS 303. Statistics in Experimental Research.

An introduction to the fundamental concepts and methods of statistics, with emphasis on applications in experimental science. Includes exploratory data analysis, correlation and regression, descriptive statistics, sampling distributions, confidence intervals, and hypothesis testing. Three lecture hours a week for one semester. Only one of the following may be counted: Statistics and Data Sciences 302, 303, 304, 305, 306, 328M, Statistics and Scientific Computation 302, 303, 304, 305, 306, or 328M. Prerequisite: An appropriate score on the College of Natural Sciences mathematics placement examination.

#### SDS 304. Statistics in Health Care.

Introduction to the fundamental concepts and methods of statistics, with emphasis on applications in the health sciences. Includes exploratory data analysis, correlation and regression, descriptive statistics, sampling distributions, confidence intervals, and hypothesis testing. Three lecture hours a week for one semester. Only one of the following may be counted: Statistics and Data Sciences 302, 303, 304, 305, 306, 328M, Statistics and Scientific Computation 302, 303, 304, 305, 306, or 328M.

#### SDS 305. Statistics in Policy Design.

An introduction to the fundamental concepts and methods of statistics, with emphasis on applications in policy evaluation and design. Includes exploratory data analysis, correlation and regression, descriptive statistics, sampling distributions, confidence intervals, and hypothesis testing. Three lecture hours a week for one semester. Only one of the following may be counted: Statistics and Data Sciences 302, 303, 304, 305, 306, 328M, Statistics and Scientific Computation 302, 303, 304, 305, 306, or 328M. Prerequisite: An appropriate score on the College of Natural Sciences mathematics placement examination.

#### SDS 306. Statistics in Market Analysis.

Introduction to the fundamental concepts and methods of statistics, with emphasis on applications in the analysis of personal and group behaviors. Includes exploratory data analysis, correlation and regression, descriptive statistics, sampling distributions, confidence intervals, and hypothesis testing. Three lecture hours a week for one semester. Only one of the following may be counted: Statistics and Data Sciences 302, 303, 304, 305, 306, 328M, Statistics and Scientific Computation 302, 303, 304, 305, 306, or 328M.

## SDS 110T, 210T, 310T, 410T. Topics in Statistics and Computation.

For each semester hour of credit earned, one lecture hour a week for one semester. Statistics and Data Sciences 110T and Statistics and Scientific Computation 110T may not both be counted. May be repeated for credit when the topics vary.

## SDS 318. Introduction to Statistical and Scientific Computation.

An introduction to quantitative analysis using fundamental concepts in statistics and scientific computation. Includes probability, distributions, sampling, interpolation, iteration, recursion, and visualization. Three lecture hours and one laboratory hour a week for one semester. Statistics and Data Sciences 318 and Statistics and Scientific Computation 318 may not both be counted.

#### **Upper-Division Courses**

#### SDS 321. Introduction to Probability and Statistics.

Covers fundamentals of probability, combinatorics, discrete and continuous random variables, jointly distributed random variables, and limit theorems. Using probability to introduce fundamentals of statistics, including Bayesian and classical inference. The equivalent of four lectures hours a week. Only one of the following may be counted: Mathematics 362K, Statistics and Data Sciences 321, Statistics and Scientific Computation 321. Prerequisite: Mathematics 408C, 408L, 408R, or 408S with a grade of at least C-.

#### SDS 222, 322. Introduction to Scientific Programming.

Introduction to programming using both the C and Fortran (95/2003) languages, with applications to basic scientific problems. Covers common data types and structures, control structures, algorithms, performance measurement, and interoperability. For each semester hour of credit earned, one lecture hour a week for one semester. Only one of the following may be counted: Statistics and Data Sciences 222, 322, 292, 392, Statistics and Scientific Computation 222, 322, 292, 392. Prerequisite: Credit or registration for Mathematics 408C, 408K, or 408N.

#### SDS 323. Statistical Learning and Inference.

An introduction to statistical influence, broadly construed as the process of drawing conclusions from data, and to quantifying uncertainty about said conclusions. Covers the major schools of thought that influence modern scientific practice, including classical frequentist methods, machine learning, and Bayesian inference. Three lecture hours a week for one semester. Statistics and Data Sciences 323 and Statistics and Scientific Computation 323 may not both be counted. Prerequisite: Statistics and Data Sciences 321 (or Statistical and Scientific Computation 321) or the equivalent.

#### SDS 325H. Honors Statistics.

An introduction to the fundamental theories, concepts, and methods of statistics. Emphasizes probability models, exploratory data analysis, sampling distributions, confidence intervals, hypothesis testing, correlation and regression, and the use of statistical software. Three lecture hours a week for one semester. Statistics and Data Sciences 325H and Statistics and Scientific Computation 325H may not both be counted. Prerequisite: Admission to the Dean's Scholars Honors Program in the College of Natural Sciences or consent of instructor.

#### SDS 328M. Biostatistics.

Introduction to methods of statistical analysis of biological data. Includes data analysis, basics of experimental design, statistical inference, interval estimation, and hypothesis testing. Three lecture hours and one discussion hour a week for one semester. Only one of the following may be counted: Biology 328M, Statistics and Data Sciences 328M, Statistics and Scientific Computation 328M. Only one of the following may be counted: Statistics and Data Sciences 302, 303, 304, 305, 306, 328M, Statistics and Scientific Computation 302, 303, 304, 305, 306, or 328M. Prerequisite: Six semester hours of coursework in biology.

#### SDS 329C. Practical Linear Algebra I.

Matrix representations and properties of matrices; linear equations, eigenvalue problems and their physical interpretation; and linear least squares and elementary numerical analysis. Emphasis on physical interpretation, practical numerical algorithms, and proofs of fundamental principles. Three lecture hours a week for one semester. Only one of the following may be counted: Mathematics 340L, 341, Statistics and Data Sciences 329C, or Statistics and Scientific Computation 329C. Prerequisite: Credit or registration for Mathematics 408C, 408K, 408N, or 408R.

#### SDS 329D. Practical Linear Algebra II.

Iterative solutions to linear equations and eigenvalue problems; properties of symmetric and nonsymmetric matrices, exploitation of parsity and diagonal dominance; introduction to multivariate nonlinear equations; numerical analysis; and selected applications and topics in the physical sciences. Three lecture hours a week for one semester. Statistics and Data Sciences 329D and Statistics and Scientific Computation 329D may not both be counted. Prerequisite: Mathematics 340L, 341, or Statistics and Data Sciences 329C (or Statistics and Scientific Computation 329C).

## SDS 332. Statistical Models for the Health and Behavioral Sciences.

Follow up to introductory statistics with an overview of advanced statistical modeling topic. Subjects may include multiple regression, ANOVA, logistic regression, random and mixed effects models including longitudinal data, time series analysis, survival analysis, factor analysis, and SEM. Use of statistical software is emphasized. Three lecture hours a week for one semester. Prerequisite: Statistics and Data Sciences 302 (or Statistics and Scientific Computation 302), 304 (or Statistics and Scientific Computation 304), 306 (or Statistics and Scientific Computation 306), 328M (or Statistics and Scientific Computation 328M), or the equivalent.

#### SDS 335. Scientific and Technical Computing.

A comprehensive introduction to computing techniques and methods applicable to many scientific disciplines and technical applications. Covers computer hardware and operating systems, systems software and tools, code development, numerical methods and math libraries, and basic visualization and data analysis tools. Three lecture hours a week for one semester. Statistics and Data Sciences 335 and Statistics and Scientific Computation 335 may not both be counted. Prerequisite: Mathematics 408D or 408M, and prior programming experience.

#### SDS 339. Applied Computational Science.

Concentrated study in a specific area or areas of application, with an emphasis on modeling and visualization. Areas may include computational biology, computational chemistry, computational applied mathematics, computational economics, computational physics, or computational geology. Three lecture hours a week for one semester. Statistics and Data Sciences 339 and Statistics and Scientific Computation 339 may not both be counted unless topics vary. May be repeated for credit when the topics vary.

#### SDS 348. Computational Biology and Bioinformatics.

Computational-based data sorting, data transformation, and data analysis; programming in Python and R. Three lecture hours and one laboratory hour per week. Prerequisite: Statistics and Data Sciences 328M (or Statistics and Scientific Computation 328M) with a grade of at least C-.

#### SDS 150K. Data Analysis Applications.

Introduction to the use of statistical mathematical applications for data analysis. Two lecture hours a week for eight weeks. Statistics and Data Sciences 150K and Statistics and Scientific Computation 150K may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Offered on the pass/fail basis only. Prerequisite: Varies with the topic.

**Topic 1: SPSS Software.** Statistics and Data Sciences 150K (Topic 1) and Statistics and Scientific Computation 150K (Topic 1) may not both be counted. Offered on the pass/fail basis only. Additional prerequisite: Upper-division standing.

**Topic 2: SAS Software.** Statistics and Data Sciences 150K (Topic 2) and Statistics and Scientific Computation 150K (Topic 2) may

not both be counted. Offered on the pass/fail basis only. Additional prerequisite: Upper-division standing.

**Topic 3: Stata Software.** Statistics and Data Sciences 150K (Topic 3) and Statistics and Scientific Computation 150K (Topic 3) may not both be counted. Offered on the pass/fail basis only. Additional prerequisite: Upper-division standing.

**Topic 4: The R Software Environment.** Statistics and Data Sciences 150K (Topic 4) and Statistics and Scientific Computation 150K (Topic 4) may not both be counted. Offered on the pass/fail basis only. Additional prerequisite: Upper-division standing.

#### SDS 352. Statistical Methods.

Study of simple and multiple regression, fundamentals of experimental design, and analysis of variance methods. May include logistic regression, Poisson regression, resampling methods, introduction to Bayesian methods, and probability models. Includes substantial use of statistical software. Three lecture hours and one laboratory hour a week for one semester. Statistics and Data Sciences 352 and Statistics and Scientific Computation 352 may not both be counted. Prerequisite: One of the following: Mathematics 316, Statistics and Data Sciences 303 (or Statistics and Scientific Computation 304), 305 (or Statistics and Scientific Computation 305), or 306 (or Statistics and Scientific Computation 306).

#### SDS 353. Advanced Multivariate Modeling.

Advanced topics in statistical modeling, including models for categorical and count data; spatial and time-series data; and survival, hazard, and hierarchical models. Extensive use of statistical software to build on knowledge of introductory probability and statistics, as well as multiple regression. Three lecture hours a week for one semester Statistics and Data Sciences 353 and Statistics and Scientific Computation 353 may not both be counted. Prerequisite: Mathematics 408D or 408M; and Statistics and Data Sciences 325H (or Statistics and Scientific Computation 325H) or 352 (Statistics and Scientific Computation 352).

#### SDS 358. Special Topics in Statistics.

Three lecture hours a week for one semester. Statistics and Data Sciences 358 and Statistics and Scientific Computation 358 may not both be counted unless topics vary. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites may vary with the topic.

**Topic 1: Applied Regression Analysis.** Through software application, discussion, and guided instruction, explores simple linear regression - what data is appropriate, how to run analysis, and how to interpret the output. Examines multiple regression with combinations of predictor variables, both continuous and categorical. There will be a discussion/ application of ANOVA, prior to preceding on to logistic regression: the prediction of discrete events. Only one of the following may be counted: Statistics and Data Sciences 358 (Topic: Applied Regression Analysis), 358 (Topic: 1), Statistics and Scientific Computation 358 (Topic: Applied Regression Analysis) Additional prerequisite: One of the following with a grade of at least C-: Statistics and Data Sciences 302, 304, 306, 328M).

#### SDS 367S. Simulation Modeling.

Basic concepts of discrete-event simulation. Statistical input and output analysis; application of simulation software; modeling of systems under uncertainty. Three lecture hours a week for one semester. Only one of the following may be counted: Statistics and Data Sciences 367S, Statistics and Scientific Computation 358 (Topic: Simulation Modeling), 367S. Prerequisite: Upper-division standing and the following with a grade of at least C-: Mathematics 408C, 408K, or 408N; and Statistics and Data Sciences 321 (or Scientific Computation 321) or an equivalent introductory statistics course.

#### SDS 374C. Parallel Computing for Science and Engineering.

Study of parallel computing principles, architectures, and technologies; and parallel application development, performance, and scalability. Designed to help prepare students to formulate and develop parallel algorithms to implement effective applications for parallel computing systems. Three lecture hours a week for one semester. Statistics and Data Sciences 374C and Statistics and Scientific Computation 374C may not both be counted. Prerequisite: Mathematics 408D or 408M, 340L, and prior programming experience using C or Fortran on Linux or Unix systems.

## SDS 374D. Distributed and Grid Computing for Science and Engineering.

Distributed and grid computing principles and technologies. Covers common modes of grid computing for scientific applications, development of grid-enabled applications, and future trends in grid computing. Three lecture hours a week for one semester. Statistics and Data Sciences 374D and Statistics and Scientific Computation 374D may not both be counted. Prerequisite: Mathematics 408D or 408M, 340L, and prior programming experience using C or Fortran on Linux or Unix systems.

## SDS 374E. Visualization and Data Analysis for Science and Engineering.

Scientific visualization principles, practices, and technologies, including remote and collaborative visualization. Introduces statistical analysis, data mining, and feature detection. Three lecture hours a week for one semester. Statistics and Data Sciences 374E and Statistics and Scientific Computation 374E may not both be counted. Prerequisite: Mathematics 408D or 408M, 340, and prior programming experience using C or Fortran on Linux or Unix systems.

#### SDS 375. Special Topics in Scientific Computation.

Three lecture hours a week for one semester. Statistics and Data Sciences 375 and Statistics and Scientific Computation 375 may not both be counted unless topics vary. May be repeated for credit when the topics vary. Prerequisite: Upper-division standing; additional prerequisites may vary with the topic.

#### SDS 378. Introduction to Mathematical Statistics.

Same as Mathematics 378K. Sampling distributions of statistics, estimation of parameters (confidence intervals, method of moments, maximum likelihood, comparison of estimators using mean square error and efficiency, sufficient statistics), hypothesis tests (p-values, power, likelihood ratio tests), and other topics. Three lecture hours a week for one semester. Only one the following may be counted: Mathematics 378K, Statistics and Data Sciences 378, Statistics and Scientific Computation 378. Prerequisite: Mathematics 362K with a grade of at least C-.

#### SDS 179R, 279R, 379R, 479R. Undergraduate Research.

Students work on an individual research project under the supervision of one or more faculty members. For each semester hour of credit earned, the equivalent of one lecture hour a week for one semester. May be repeated for credit. Prerequisite: Upper-division standing and consent of instructor.

## **UTeach-Natural Sciences**

### **UTeach-Natural Sciences: UTS**

### **Lower-Division Courses**

#### UTS 101. Secondary Teacher Education Preparation: Step 1.

Introduction to mathematics, computer science, and science teaching as a career. Discussions include standards-based lesson design and various teaching and behavior management strategies. Fieldwork consists of planning and teaching four inquiry-based lessons to students in grades three to six in local elementary schools. One and one-half class hours a week for one semester; at least ten hours of fieldwork a semester are also required. Chemistry 107 (Topic: STEP1-UTeach) and UTeach-Natural Sciences 101 may not both be counted. Prerequisite: For degree holders, application and admission to the UTeach CNS program.

#### UTS 110. Secondary Teacher Education Preparation: STEP 2.

Topics may include routes to teacher certification in mathematics, computer science, and science teaching; various teaching methods that are designed to meet instructional goals; and learner outcomes. Students develop and teach three inquiry-based lessons in their field in a middle school, and participate in peer coaching. One and one-half class hours a week for one semester; at least twenty hours of fieldwork a semester are also required. Biology 101C (Topic: STEP 2) and UTeach-Natural Sciences 110 may not both be counted. Prerequisite: UTeach-Natural Sciences 101 with a grade of at least C-, and a University grade point average of at least 2.20.

### **Upper-Division Courses**

#### UTS 350. Knowing and Learning in Math and Science.

Same as Curriculum and Instruction 365C. Restricted to students in the UTeach-Natural Sciences program. Psychological foundations of learning; problem solving in mathematics and science education utilizing technology; principles of expertise and novice understanding of subject matter; implications of high-stakes testing; and foundations of formative and summative assessment. Three lecture hours a week for one semester; additional hours may be required. Curriculum and Instruction 365C and UTeach-Natural Sciences 350 may not both be counted. Prerequisite: Credit with a grade of at least C- or registration for UTeach-Natural Sciences 101.

#### UTS 355. Classroom Interactions.

Same as Curriculum and Instruction 365D. Restricted to students in the UTeach-Natural Sciences program. Principles of delivering effective instruction in various formats (lecture, lab activity, collaborative settings); examination of gender, class, race, and culture in mathematics and science education; overview of policy related to mathematics and science education. Three lecture hours a week for one semester; additional hours may be required. Curriculum and Instruction 365D and UTeach-Natural Sciences 355 may not both be counted. Prerequisite: The following courses with a grade of at least C-: Curriculum and Instruction 365C or UTeach-Natural Sciences 350, and UTeach-Natural Sciences 110; and a University grade point average of at least 2.50.

#### UTS 360. Project-Based Instruction.

Same as Curriculum and Instruction 365E. Restricted to students in the UTeach-Natural Sciences program who have earned a passing score on the preliminary portfolio. Foundations of project-based, casebased, and problem-based learning environments; principles of projectbased curriculum development in mathematics and science education; classroom management and organization of project-based learning classrooms. Three lecture hours a week for one semester with additional fieldwork hours to be arranged. Curriculum and Instruction 365E and UTeach-Natural Sciences 360 may not both be counted. Prerequisite: Curriculum and Instruction 365D or UTeach-Natural Sciences 355 with a grade of at least C-, and a University grade point average of at least 2.50.

#### UTS 170. Student Teaching Seminar.

Restricted to students in the UTeach-Natural Sciences program who have earned a passing score on the preliminary portfolio. Discussions include student teaching experiences, contemporary critical issues in education, and preparation for the state certification exam. One lecture hour a week for one semester. Chemistry 107 (Topic: Special Topics Seminar) and UTeach-Natural Sciences 170 may not both be counted. Prerequisite: Credit or registration for Curriculum and Instruction 650S, and a University grade point average of at least 2.50.

## UTS 675. Student Teaching for Secondary and Middle Grades.

Closely supervised field coursework in a cooperating school. Experience includes carrying out the duties of a secondary or middle grades teacher. Twenty hours of fieldwork a week for one semester. Offered on the pass/fail basis only. Prerequisite: A University grade point average of at least 2.50, approval of the preliminary portfolio by the College of Natural Sciences UTeach Program, consent of the UTeach adviser in the College of Natural Sciences, and concurrent enrollment in UTeach-Natural Sciences 170.

# **School of Nursing**

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## **General Information**

### Mission

The purpose of the School of Nursing is to achieve excellence in undergraduate and graduate education, research, public service, and to advance the missions of The University of Texas at Austin through:

- 1. Preparing students at the baccalaureate level to assume roles in professional nursing practice.
- 2. Preparing students at the graduate level to assume leadership in practice, education, and research.
- 3. Promoting excellence in nursing scholarship.
- 4. Advancing the health of the public through developing and disseminating new knowledge about health, health care, and health care delivery through scholarly inquiry.
- 5. Providing consultation, health care programs, and health care services in response to emerging and urgent public health needs.

### History

The University of Texas School of Nursing, established in Galveston in 1890 as the John Sealy Hospital Training School for Nurses, is one of the oldest schools of nursing in the Southwest. In 1896 it was transferred to the University of Texas and became the School of Nursing, a division of the Medical Branch, with the diploma granted by the University. In addition to the diploma course, a curriculum leading to the degree of Bachelor of Science in Nursing was established in 1923 in cooperation with the College of Arts and Sciences of the Main University in Austin. In 1932 the School of Nursing was renamed the John Sealy College of Nursing. The degree program was transferred to the college in 1943.

With the financial support of the Texas Graduate Nursing Association, graduate courses in nursing were first offered in 1930 in the Department of Physical and Health Education at the Main University. In 1940, a complete curriculum was established leading to the degree of Bachelor of Science in Nursing Education. In 1945, the curriculum was transferred to the Medical Branch administration, bringing the John Sealy College of Nursing and the new Department of Nursing Education together to form the School of Nursing with its own dean. In 1949, a curriculum leading to the degree of Bachelor of Science in Nursing was established for graduates of diploma programs. The last class of students enrolled in the diploma program was admitted to the School of Nursing in 1957; since that time the school has offered a single program leading to the Bachelor of Science in Nursing.

Funding from the W. K. Kellogg Foundation provided for a program leading to the Master of Science in Nursing with a major in nursing administration, first offered in 1952. Participating in the program of the Southern Regional Education Board for graduate education in nursing, the School of Nursing offered additional specialization in 1955. At that time the name of the school was changed to the University of Texas Medical Branch School of Nursing.

In the fall of 1960, The University of Texas at Austin became an extension campus of the School of Nursing, which was still located in Galveston, and nursing courses were offered on the Austin campus for the first time. The School of Nursing was reorganized in 1967 as The University of Texas Nursing School (System-wide) and administrative offices were moved to Austin. The school was renamed The University of Texas System School of Nursing in 1972. Junior- and senior-level nursing courses were offered in Austin, El Paso, Fort Worth, Galveston, Houston, and San Antonio.

On March 26, 1976, the Board of Regents of The University of Texas System voted to reorganize the schools of nursing in the system and to place each school under the administration of the president of the health science center or academic institution nearest it. On September 1, 1976, the School of Nursing at Austin became a part of The University of Texas at Austin.

A program leading to the Doctor of Philosophy degree in nursing was initiated in 1974. Nursing faculty members conduct research on a wide variety of topics. Since 2002, the School of Nursing has been ranked among the top institutions in research funding received from the National Institutes of Health.

### Facilities

The 110,008-square-foot, five-story Nursing School building houses administrative, faculty, staff, and research offices, as well as large and small classrooms and seminar and conference rooms. Also located in the building are the Cain Center for Nursing Research, the St. David's Center for Health Promotion and Disease Prevention Research in Underserved Populations, and the School of Nursing Learning Enhancement and Academic Progression Center, with an audiovisual library and a staff who provide technical assistance for clinical simulation and skills, instructional design, and production.

Learning experiences in the health field are numerous and varied. The School of Nursing has ongoing clinical placement agreements with more than two hundred agencies. These include the Austin State Hospital, Dell Children's Medical Center of Central Texas, Dell Seton Medical Center at The University of Texas, and St. David's Medical Center. Other community settings used for student field experiences include nursing homes, neighborhood health centers, day-care centers, state and local health departments, physicians' offices, and clinics, including our Family Wellness Center, and our Children's Wellness Center (located in Del Valle).

# Financial Assistance Available through the School

Application forms for scholarships are available from the Office of Financial Aid (http://finaid.utexas.edu) and from the School of Nursing (http://nursing.utexas.edu/academics/services.html), 1710 Red River Street, Austin TX 78712. The School of Nursing Scholarship Committee selects the recipients for endowed nursing scholarships. A list of endowed scholarships can be found on the School of Nursing website (http://nursing.utexas.edu/academics/endowed.html). Other scholarships are frequently available through the generosity of groups such as the The University of Texas at Austin School of Nursing Alumni Network, area civic organizations, and several nursing student organizations. Information is available in the Office of Student Services (http://nursing.utexas.edu/academics/services\_sa.html) each semester.

### **Other Financial Aid Programs**

### **ROTC Nursing Scholarships**

To be eligible for an ROTC scholarship, an applicant must be a United States citizen and must be less than 25 years old on June 30 of the calendar year during which commissioning is scheduled.

**Air Force ROTC Nursing Scholarships**. These scholarships provide for payment of tuition and fees and for textbooks and a monthly allowance during the school year. For additional information, contact The University of Texas at Austin, Department of Air Force Science, 1 University Station C3600, Austin TX 78712.

**Army ROTC Nursing Scholarships.** These scholarships provide for payment of tuition and fees, a flat rate for textbooks, and a monthly allowance during the school year. Students must attend the Nursing Advanced Camp during the summer between the junior and senior years and work individually with a licensed BSN preceptor. Students may apply to the dean for independent study credit; applications are considered on a case-by-case basis. For additional information, contact The University of Texas at Austin, Department of Military Science, 1 University Station C3606, Austin TX 78712.

**Navy ROTC Nursing Scholarships**. These scholarships provide for payment of tuition and fees and for textbooks and a monthly allowance during the school year. For additional information, contact The University of Texas at Austin, Department of Naval Science, 1 University Station C3604, Austin TX 78712.

### **Vocational Rehabilitation**

The Texas Department of Assistive and Rehabilitative Services (DARS) offers assistance in payment of tuition to students who have certain disabling conditions, provided their vocational objectives are approved by a DARS counselor. Services are also available to help students with disabilities find or keep employment. More information is available at http://www.dars.state.tx.us/drs/vr.shtml.

### **Academic Advising**

All nursing students must come to the School of Nursing before registration each semester for academic advising. Individualized academic advising is managed by the academic advisers in the Office of Student Services. In addition, group advising is offered to assist students with clinical schedules and particular requirements of the upcoming semester.

## **Student Organizations**

Undergraduate students interested in nursing are eligible for membership in The University of Texas Nursing Students Association. Through the association, nursing students are represented on campus committees and in campus activities involving all students. The local association is affiliated with the Texas Nursing Students' Association and the National Student Nurse Association. In addition, students can join the Longhorn Association for Men in Nursing, the African American Nursing Students Association, the Hispanic Nursing Students Association, and the Student Community of Asian Nurses.

Qualified students in the School of Nursing are also eligible for membership in Epsilon Theta Chapter of Sigma Theta Tau International Honor Society of Nursing.

## **Admission and Registration**

### Admission

### Admission to the University

Admission and readmission of undergraduate students to the University is the responsibility of the director of admissions. Information about admission to the University is given in the *General Information Catalog* (http://catalog.utexas.edu/general-information/admission).

#### Admission to the Professional Sequence in Nursing

Application to the School of Nursing is made concurrently when applying to the University. Acceptance into the School of Nursing is based on (1) the strength of the student's academic background; (2) participation in extracurricular and work activities, especially related to community service and health care; and (3) the quality of the essay.

### **Internal Transfer**

The University of Texas at Austin students currently enrolled in other departments who want to change majors to nursing must attend a School of Nursing Internal Transfer Information Session (https:// nursing.utexas.edu/academics/ud\_info.html#internal). To be considered for change of major admission, the student must have completed Chemistry 301, Principles of Chemistry I, Statistics and Data Sciences 302, Data Analysis for the Health Sciences, and Biology 311C, Introductory Biology I. Additionally, students should be on schedule to graduate within four years and have a University grade point average of 3.00. Internal transfer requests may be very competitive, and admission is offered only on a space-available basis. Interested students should consult The University of Texas at Austin policy for Transfer from One Division to Another within the General Information Catalog (http:// catalog.utexas.edu/general-information/registration-tuition-and-fees/ transfer-from-one-division-to-another-within-the-university), as well as the School of Nursing website (http://www.nursing.utexas.edu) for current details about the transfer process and available information sessions.

## **External Transfer**

All students who wish to transfer to the University from another institution must apply to the University Office of Admissions as described in the *General Information Catalog* (http://catalog.utexas.edu/ general-information/admission). Transfer students must meet the same requirements as University students seeking admission to the School of Nursing and select nursing as their first choice major. To be considered for transfer admission to the School of Nursing, students must have completed 30 semester hours of transferable coursework and are advised to attend an information session. Transfer admission to the School of Nursing is competitive. Transfer applications are competitively reviewed, and admission is offered on a space-available basis. Since space is limited, applicants are strongly encouraged to indicate a second choice of major in case they are not admitted to the School of Nursing.

A student who wishes to transfer into the upper-division nursing coursework from another nursing school after starting nursing clinical or lab work must make an appointment with the School of Nursing, Office of Student Services (https://nursing.utexas.edu/academics/ services\_sa.html) for academic advising and transcript review. Students from other nursing schools must consult an adviser in the School of Nursing before applying for admission to the University. In addition to meeting the regular University admission requirements, the student must apply for admission to the School of Nursing. He or she must submit an official transcript from each institution attended, letters of recommendation from faculty members at the previous nursing school, and course information for all completed nursing courses. Requests to transfer into upper division at the School of Nursing are approved on a limited, space-available basis.

Transfer students must meet the same requirements as University students seeking admission to the professional sequence; however, they are considered for admission to the School of Nursing only if they are admitted to the University.

### Registration

The General Information Catalog (http://catalog.utexas.edu/generalinformation/registration-tuition-and-fees) gives information about registration, adding and dropping courses, transfer from one division of the University to another, and auditing a course. The Course Schedule (http://registrar.utexas.edu/schedules), published before registration each semester and summer session, includes registration instructions, advising locations, and the times, places, and instructors of classes. The Course Schedule and the General Information Catalog are published on the University Registrar's website (http://registrar.utexas.edu).

## Academic Policies and Procedures

### **Student Responsibility**

- 1. It is the student's responsibility to be informed of general and special notices posted in the School of Nursing building and on the listserv.
- The student must make arrangements for the completion of all work, including makeup examinations and requirements for removal of conditional and incomplete grades.
- 3. Because the curriculum is demanding, students are urged to limit work hours while in the program. A student's combined employment and semester-hour load (including clinical laboratory hours) should not exceed 40 hours a week in either a long-session semester or a summer term. During the final month of the last semester of the program, students are enrolled in a full-time preceptorship and are unable to have outside employment.
- 4. Students may be employed in area hospitals and clinics as nursing assistants, performing functions for which they have been trained by the employing institution and for which the institution has a clearly discernible policy, either in writing or by precedent, defining the scope of these functions. It is illegal for unlicensed students to practice as professional nurses.

Students should be aware that (1) the School of Nursing assumes no responsibility for their activities as employees of an agency; (2) they are personally responsible and liable for any activity they participate in while employed; (3) professional liability insurance purchased by students is valid only in their student role, not in their employment role; (4) individuals who practice illegally may jeopardize their future careers, since those who are convicted of violating the Nurse Practice Act may not be eligible to write state board examinations and subsequently to be licensed.

Students employed in an agency are personally and professionally responsible for engaging only in those activities that fall within their job descriptions as non-licensed workers (such as aides). They have a responsibility to refuse to participate in activities that they have not been legally licensed to perform, such as giving medications and assuming total responsibility for a nursing unit.

5. Students should be familiar with the Student Standards of Conduct given in subchapter 11, Appendix C, "Student Discipline and Conduct," *General Information* (http://catalog.utexas.edu/general-information/ appendices/appendix-c/student-discipline-and-conduct), as well as

the University Honor Code (https://www.utexas.edu/about/missionand-values) and the School of Nursing Honor Code. Students are expected to read and sign a pledge to abide by the Code of Honor.

## **School of Nursing Honor Code**

The profession of nursing has a legacy of public respect and trust. We provide specialized care for the health needs of individuals and the community with integrity, honesty, compassion, and state-of-the-art knowledge and skills. Learning and practicing responsible and ethical professional behavior is a vital part of professional education.

As a student in The University of Texas at Austin's School of Nursing, I pledge myself to be honest in all of my student activities including, but not limited to, all of my scholastic work and interactions with patients, members of the community, faculty, and peers. Furthermore, I will not use any substance prior to or during my interaction with patients that could alter my judgment or ability to render safe care: this includes but is not limited to any use of alcohol, illegal drugs, and prescription or over-the-counter drugs that may impair my mental and/or physical abilities required to perform safe patient care. I will disclose to my instructor any violations of the above standards of conduct.

# Standards of Nursing Performance and Progress

### Progression Requirements for Nursing Majors Prior to Nursing Clinical or Lab Courses

Students must maintain a University grade point average of at least 2.80 in required nursing degree coursework prior to taking nursing courses with a clinical or lab component. In addition, students must attain a grade of at least *C*- in each natural science course. Courses in which the student receives a grade of less than C-, Q, or W must be repeated in residence to resume progression toward completing the degree. Students may not enroll more than twice in any one natural science course (including *Q* or *W*) and should take a full academic load of at least 12 semester hours of coursework when repeating a course. For the student to continue in the nursing major, no more than two natural science course in which a grade of *C*- or better was awarded.

Students must meet all progression requirements prior to taking nursing courses with a clinical or lab component. Students who do not meet these requirements will not be permitted to continue in the nursing major. Students are advised every semester about the coursework needed to complete the degree in four academic years.

Students are placed on academic probation in the School of Nursing if they receive a grade of *D*+, *D*, *D*-, or *F* in any nursing or natural science course. Students are subject to dismissal from the nursing major if they receive more than one *D*+, *D*, *D*-, or *F* during a semester or receive a second *D*+, *D*, *D*-, or *F* while on academic probation.

### Progression Requirements and Performance Standards for Upper Division Nursing Courses

Patient safety is a critical element in every clinical course. Clinical errors related to patient care, including those near-miss incidents intercepted by the faculty, may interfere with a student's progression in the course and in the program. The standards of performance are described in course syllabi and clinical evaluation tools for clinical practicum courses.

A student must earn a grade of at least *C* in each nursing course for the course to be counted toward degree requirements. Concurrent or sequential enrollment is required as stated in each course description.

If the student is not on scholastic probation at the University, permission may be granted to repeat a required nursing course in which he or she failed to earn a grade of *C* or better. To receive credit, the student must repeat the course at The University of Texas at Austin School of Nursing. The semester in which a course is repeated is at the discretion of the dean and is dependent on the space available.

A student may repeat a nursing course only once. If the student does not earn a grade of at least *C* upon repeating the course, he or she cannot continue in the School of Nursing. If, while repeating the course, the student drops the course or withdraws from the University at a time when the student's performance in the course is considered to be inferior to that required for a grade of *C*, he or she may not re-enroll in the course or continue in the School of Nursing.

No more than two nursing courses may be repeated.

A student may not repeat for credit a course in which a grade of *C* or better was awarded.

As a prerequisite to medication administration in clinical nursing courses, students are required to pass a medications and calculations test with a grade of at least 90.

# Compliance Requirements for Clinical Courses

Students must provide documentation confirming completion of compliance requirements prior to participating in clinical nursing courses. Log in to the School of Nursing website (http:// www.nursing.utexas.edu/current) for more information.

### **Medical Clearance Requirements**

Clinical experiences for nursing students are provided in hospitals and other health care agencies with which the School of Nursing is affiliated. A number of these facilities require that nursing students assigned to them have evidence of good health and immunity to certain diseases. Students must provide evidence of compliance with immunization requirements before they begin clinical nursing courses. Students must also submit a health certificate completed by a qualified health care provider prior to starting their first clinical rotation.

### **Criminal Background Checks**

Students are required to submit to the Texas Board of Nursing criminal background checks before beginning the program. Information about the process is available on the School of Nursing Web site. Students with concerns about eligibility are urged to seek official determination from the Texas Board of Nursing (http://www.bon.state.tx.us). Further, we urge students with concerns to seek the background check six months in advance of enrollment to allow sufficient time for investigation and Texas Board of Nursing approval.

### **Employment Background Check**

Agencies in which nursing students are placed for clinical work require an employment background check. Directions to complete this requirement are on the School of Nursing Web site listed with other compliance requirements.

### **Drug Screen**

Clinical agencies require that a drug screen be completed prior to participating in patient care. Students are to follow directions for the drug screen shown with the compliance requirements on the School of Nursing website.

### **CPR and First Aid Requirements**

Current certification in cardiopulmonary resuscitation and first aid are required for participation in clinical nursing courses. The CPR course must be the Basic Life Support for Healthcare Providers and include Automatic External Defibrillator from the American Heart Association. Online courses for CPR are not acceptable. The basic first aid certification must be acquired from the American Heart Association (Heartsaver First Aid) or from a local emergency medical services agency (National Safety Council First Aid). Students must provide evidence of current certification before they begin clinical courses. Students who are registered nurses, licensed vocational nurses, or emergency medical technicians are not required to provide evidence of first aid certification.

### **Professional Liability Insurance**

Professional liability insurance is required of all students enrolled in the professional sequence in the School of Nursing. Students will be billed through the "What I Owe" system for liability insurance each semester they are participating in clinical courses. All student policies expire on the date of graduation.

### **Training Modules**

All students must complete the following modules on the School of Nursing Intranet Site (http://www.nursing.utexas.edu/current) before participating in clinical nursing coursework: online orientation, facilities training, and training on the Health Insurance Portability and Accountability Act (HIPAA).

### Health and Hospitalization Insurance

Students are required to purchase health insurance. The cost of personal health care, including care required as the result of clinical practicum experiences, is not covered by either the University, the School of Nursing, or clinical agencies. Information about low-cost group health insurance is available through University Health Services (http:// healthyhorns.utexas.edu). The professional liability insurance students buy as a part of compliance for participating in clinical courses does not cover health care expenses.

### **Uniforms and Other Expenses**

Students must purchase uniforms, shoes, name badges, and other supplies before taking the first clinical nursing course. Specific requirements and information about suggested equipment are distributed as a part of orientation and will be available in course syllabi.

### Transportation

Upper-division clinical courses require students to go to various clinical facilities and community sites at varied hours. Students must have their own transportation.

### Honors

### **University Honors**

The designation University Honors, awarded at the end of each longsession semester, gives official recognition and commendation to students whose grades for the semester indicate distinguished academic accomplishment. Both the quality and the quantity of work done are considered. Criteria for University Honors are given in *General Information*.

### **Graduation with University Honors**

Students who, upon graduation, have demonstrated outstanding academic achievement are eligible to graduate with University Honors. Criteria for graduation with University Honors are given in *General Information* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/honors/#universityhonorstext).

### **Nursing Honors Program**

The Nursing Honors Program is designed to enhance the educational experience of high-achieving undergraduate nursing majors by focusing on the development of scholarship. Students must apply to this competitive honors program, which begins in the sophomore year. Admission to the program requires approval of the Honors Program Committee.

Students in the program must complete Nursing 321H, 117H, 264H, and 377H. These courses provide students with enhanced mentorship experiences. Students must complete an honors project with a focus on research, ethics, or leadership. Students are also required to take Nursing 337, *Independent Study* with their mentor with the focus on their honors project. The statement "Special Honors in Nursing" appears on the transcript of each student who completes the honors program.

### Sigma Theta Tau International

Epsilon Theta Chapter of Sigma Theta Tau International Honor Society of Nursing, was chartered at the University on May 16, 1980. Membership in Sigma Theta Tau is an honor conferred by active chapters on students who demonstrate academic excellence and on nursing leaders who advance the scientific base of the profession. The society recognizes superior achievement in many areas, facilitates the development of leadership qualities, fosters high professional standards, encourages creative work, and strengthens commitment to the ideals of nursing.

Each year qualified students in the undergraduate and graduate programs may apply for consideration for membership. Invitations to membership are extended to students who are in the top 35 percent of their graduating class. Undergraduates must have a grade point average of at least 3.00; graduate students must have a grade point average of at least 3.50. Qualified community nursing leaders may also be invited to membership. Applications for membership in Epsilon Theta Chapter are available from the Office of Student Services in the School of Nursing (https://nursing.utexas.edu/academics/services\_sa.html).

At the induction ceremony each spring, Epsilon Theta Chapter announces its awards, grants, and scholarship recipients. A scholarship is awarded to an upper-division nursing student who has demonstrated leadership potential and outstanding scholastic achievement. The chapter also awards start-up grants annually to Epsilon Theta Chapter members and/or students to fund research projects.

Sigma Theta Tau International, with active chapters on more than four hundred campuses in the United States and in several other countries, offers opportunities for involvement at the chapter, regional, national, and international levels.

## **Credit by Examination**

The faculty believes that each educational experience should build on previous achievements to encourage fulfillment of each student's potential. Therefore, all students and registered nurses are urged to seek advice on arranging a logical sequence of work. The faculty subscribes to the principle that a candidate's competence should be validated and that credit should be awarded on the basis of satisfactory achievement on examinations as well as in the classroom. Twenty-four of the last 30 semester hours of credit presented for the degree must be earned in residence, rather than by examination, correspondence, or transfer.

An examination for credit may not be taken in a course in which the student is enrolled, which the student has completed, or which the student has dropped with either a passing or a failing grade.

University policies regarding credit by examination are given in *General Information* (http://catalog.utexas.edu/general-information/ academic-policies-and-procedures/testing-and-evaluation-services/ #courseplacementandcreditbyexaminationtext).

## Graduation

## **Special Requirements of the School**

All students must fulfill the General Requirements (p. 20) for graduation. Students in the School of Nursing must also fulfill the following requirements:

- 1. All University students must have a grade point average of at least 2.00 to graduate. In the School of Nursing, students must also have a grade point average of at least 2.00 in the coursework used to fulfill the upper-division requirement.
- 2. A candidate must complete the prescribed curriculum and must meet all other requirements of the School of Nursing.
- 3. A student must supply the School of Nursing with transcripts of courses taken outside the school as the courses are completed.

## Degree Audit

A degree audit is prepared when the student begins the junior year of nursing courses. The student is then notified of the courses he or she must take and the requirements he or she must fulfill to receive the degree. The degree audit is normally done according to the catalog in effect when the student was admitted to the School of Nursing, but the student may choose to have it done according to any catalog under which he or she is eligible to graduate. Rules on graduation under a particular catalog are given in Graduation Under a Particular Catalog (p. 21).

In advising and in registering students, the dean and advisers try to prevent errors. Avoidance of errors is the main purpose of the degree audit, but it remains the responsibility of the student to fulfill all catalog requirements.

## **Graduation Application Form**

In the long-session semester or summer session in which the degree is to be awarded, the candidate must be registered at the University and must file a Graduation Application Form in the School of Nursing Office of Student Services. The form must be filed by the deadline to apply for an undergraduate degree, which is given in the official academic calendar (http://registrar.utexas.edu/calendars).

### Licensure as a Professional Nurse

Upon graduation from the BSN program, students seeking licensure as a registered nurse must register to take the National Council Licensure Examination (NCLEX). To ensure eligibility, the Texas Board of Nursing will rerun the criminal background check that was conducted prior to beginning the nursing program. In addition, students must meet all of the eligibility requirements for licensure as indicated by the Texas Board of Nursing. To determine eligibility, students should consult the Texas Board of Nursing website (http://www.bon.state.tx.us). Students with questions or concerns are encouraged to contact the Board of Nursing directly prior to enrollment in the nursing program and consult with the Assistant Dean for Student Services at the School of Nursing.

## **Degrees and Programs**

## Programs in the School of Nursing

The School of Nursing offers an undergraduate program leading to the degree of Bachelor of Science in Nursing and graduate programs leading to the Master of Science in Nursing degree and the Doctor of Philosophy degree with a major in nursing. The undergraduate program is designed for students who wish to enter the profession of nursing. Students who have earned an associate's degree in nursing and wish to obtain the baccalaureate degree may apply as transfer students. The master's and doctoral degree programs are designed to prepare professionals for advanced nursing practice and research in nursing.

The baccalaureate program is accredited by the Commission on Collegiate Nursing Education (CCNE) and the Texas Board of Nursing.

### **Objectives of the Bachelor's Degree Program**

The graduate of the baccalaureate program in nursing is expected to

- 1. Demonstrate critical thinking to integrate knowledge from nursing, biological and behavioral sciences, and the humanities in planning, implementing, and evaluating nursing care.
- 2. Apply critical thinking and clinical judgment within a problem-solving process to meet the health care needs of individuals, families, aggregates, and communities in a variety of settings.
- 3. Exhibit responsibility and accountability for one's own actions as a health care professional.
- 4. Participate in the delivery of health care through case management, interprofessional collaboration, delegation, supervision, coordination, and consultation.
- 5. Participate in nursing and interprofessional efforts to improve the delivery of high-quality, safe and culturally competent health care to diverse individuals, families, aggregates, and communities.
- 6. Demonstrate core professional values to complement continued personal and professional growth.
- 7. Practice nursing according to professional and ethical standards.
- 8. Critically appraise and apply research findings to demonstrate evidence-based nursing practice.
- 9. Analyze health policy and its effects on diverse individuals, families, aggregates, communities, and health agencies.
- 10. Integrate information and health care technology in nursing practice, administration, education, and research.
- 11. Utilize leadership skills to advance the profession of nursing and promote continuous improvement of the health care delivery system.

## Applicability of Certain Courses ROTC Courses

The dean has the authority to substitute an equivalent air force science, military science, or naval science course or courses for a course or courses prescribed by the School of Nursing; core curriculum courses cannot be substituted. The dean can also make adjustments to compensate for any differences in semester hour value. The total number of semester hours required for the degree remains unchanged.

### **Correspondence and Extension Courses**

Credit earned by correspondence or extension from the University or elsewhere will be counted toward a Bachelor of Science in Nursing

degree if approved by either the assistant dean for student services or the assistant dean for undergraduate programs. A student planning to meet pre-professional course requirements with correspondence or extension courses should consult the Office of Student Services to ensure enrollment in appropriate courses. Credit for professional sequence courses may not be earned by correspondence or extension.

## **Bachelor of Science in Nursing**

This program consists of 125 to 126 semester hours of coursework. All students must complete the University's Core Curriculum (p. 23). In some cases, a course that is required for the Bachelor of Science in Nursing may also be used to fulfill a requirement of the core curriculum. In order to meet prerequisites, students must take most of the nursing courses in a specific sequence. Upon completion of the program, students are awarded the Bachelor of Science in Nursing degree and have fulfilled the prescribed course of study and clinical practice required to take the National Council Licensure Examination (NCLEX) for licensure as a registered nurse.

### Foreign Language Requirement

Students may fulfill the foreign language component of the University's basic education requirements by completing two years of a single foreign language in high school, by earning an appropriate score on one of the placement examinations administered by the University, or by completing two semesters of college coursework in a single foreign language in addition to the degree requirements given below. If the foreign language requirement will be fulfilled by transfer credit, credit by examination, or extension or correspondence courses, it must be fulfilled before the first semester of the student's senior year. Nursing 354 may not be counted toward the foreign language requirement. For students who take college coursework to complete the foreign language requirement, Spanish is recommended.

### **Flag Requirements**

In the process of fulfilling the requirements for the Bachelor of Science in Nursing degree, students must fulfill flag requirements. Students must earn credit for one flag in ethics, one flag in global cultures, one flag in cultural diversity, one flag in independent inquiry, one flag in quantitative reasoning, and three flags in writing.

Courses with flags are identified in the *Course Schedule*. For additional information about flag requirements, see Additional Basic Education Requirements (p. 23).

## **Suggested Arrangement of Courses**

First Year			
First Term	Hours Second Term	Hours Summer Term	Hours
RHE 306	3 BIO 311C	3 GOV 310L	3
CH 301	3 NTR 306	3 American History Core Course	3
SDS 302	3 E 316L, 316M, 316N, or 316P	3	
UGS 302 or 303	3 PSY 301	3	
Visual and	3 N 309	3	
Performing Arts Core			
Course			
	15	15	6
Second Year			
First Term	Hours Second Term	Hours	
American History	3 N 320	3	
Core Course			
BIO 446L	4 N 224	2	
BIO 326M	3 N 127P	1	

N 310	3 N 321	3	
PSY 304 or HDF 313	3-4 BIO 365S	3	
and HDF 113L			
	BIO 165U	1	
	GOV 312L or 312P	3	
	16-17	16	
Third Year			
First Term	Hours Second Term	Hours	
N 356	3 N 265	2	
N 256P	2 N 365P	3	
N 325	3 N 255C	2	
N 325P	3 N 157P	1	
N 264	2 N 223	2	
	N 273	2	
	PHM 338	3	
	13	15	
Fourth Year			
First Term	Hours Second Term	Hours	
N 266	2 N 275	2	
N 366P	3 N 375P	3	
N 255D	2 N 274	2	
N 355P	3 N 377	3	
N 354	3 N 277P	2	
N 250	2 N 279P	2	

Total credit hours: 125-126

## Courses

The faculty has approval to offer the following courses in the academic years 2018–2019 and 2019–2020; however, not all courses are taught each semester or summer session. Students should consult the *Course Schedule* to determine which courses and topics will be offered during a particular semester or summer session. The *Course Schedule* may also reflect changes made to the course inventory after the publication of this catalog.

A full explanation of course numbers is given in *General Information* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/credit-value-and-course-numbers). In brief, the first digit of a course number indicates the semester hour value of the course. The second and third digits indicate the rank of the course: if they are 01 through 19, the course is of lower-division rank; if 20 through 79, of upper-division rank; if 80 through 99, of graduate rank.

### **Nursing: N**

#### **Lower-Division Courses**

#### N 107, 207, 307. Topics in Nursing.

One, two, or three lecture hours a week for one semester, with one discussion hour a week if required by the topic. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 1: Women's Reproductive Health for Nonscience Majors.** Same as Sociology 310S and Women's and Gender Studies 301 (Topic 7). Overview of contemporary women's reproductive health issues, with emphasis on historical, physiological, psychosocial, and cultural influences that affect the reproductive health of women during adolescence, the childbearing years, and midlife. Three lecture hours a week for one semester. Only one of the following may be counted: Nursing 307 (Topic 1), Sociology 308 (Topic 2), 310S, Women's and Gender Studies 301 (Topic 7). Prerequisite: One year of high school biology, or Biology 301L or 309D.

#### N 309. Global Health.

Overview of global health, with emphasis on the determinants of health, health indicators, human rights, globalization, current socioeconomic factors, health care systems, and public health systems. Three lecture hours a week for one semester.

#### N 310. Communication in Health Care Settings.

Introduction to theories and models of communication in relation to health care; basic factors affecting interpersonal communication in health care settings. Three lecture hours a week for one semester. Required for nursing majors.

## N 117H. Introduction to Nursing Scholarship: Honors Seminar.

Introduction to the nature of nursing scholarship, along with related research and clinical and educational career opportunities. Topics include leadership, research, and ethics as they relate to nursing. One lecture hour a week for one semester. Prerequisite: Admission to the School of Nursing Honors Program.

## N 119, 219, 319, 419, 519, 619. International Learning Seminars.

Discussion of various issues related to the academic, cultural, and personal aspects of completing academic work in international locations. For each semester hour of credit earned, one lecture hour a week for one semester. Nursing 119, 219, 319, 419, 519, 619 and Undergraduate Studies 119 may not both be counted unless the topics vary. May be repeated for credit when the topics vary.

### **Upper-Division Courses**

#### N 320. Introduction into Patient-Centered Nursing Care.

Examines the profession of nursing and introduces the concept of nursing process as a framework for patient-centered care of younger and older adults. Special emphasis will be placed on topics that apply to the bio-psycho-social-spiritual needs of the aging adult. Three lecture hours a week for one semester. Nursing 227 and 320 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Biology 326M, 446L, Nutrition 306, Psychology 301; credit or registration for Biology 365S and 165U.

#### N 321. Ethics of Health Care.

Examination of ethical issues of health care and related legal concerns; contradictions, inconsistencies, and competing views that lead to dilemmas in health care. Three lecture hours a week for one semester. Nursing 321 and 321H may not both be counted. Prerequisite: Rhetoric and Writing 306.

#### N 321H. Ethics of Health Care: Honors.

Ethical issues in health care and related legal concerns; contradictions, inconsistencies, and competing views that lead to dilemmas in health care. Emphasis on resolving ethical dilemmas through ethical reasoning and ethical obligations in health professional-patient relationships; and just allocation of scarce health care resources. Three lecture hours a week for one semester. Nursing 321 and 321H may not both be counted. Prerequisite: Admission to the School of Nursing Honors Program, or consent of instructor.

#### N 322. Transition to Professional Nursing.

Restricted to students in the RN-BSN accelerated track. Designed to provide the RN student with a transition into the baccalaureate and professional nursing roles. Explores professional socialization in the work and education settings; develops professional career goals and career plans; and includes discussion of role transition in nursing practice, with attention to expanded and advanced nursing practice roles. Three lecture hours a week for one semester. Prerequisite: Upperdivision standing.

#### N 223, 323. Genetics in Health Care.

The integration of genetic information into nursing practice, including ethical, legal, psychological, and social issues. For each semester hour of credit earned, one lecture hour a week for one semester. Nursing 223 and 323 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Nursing 325 or consent of instructor.

#### N 224. Health Assessment Skills.

Discussion, application, and documentation of health assessment skills needed to provide data for health promotion and nursing interventions. One and one-half lecture hours and one laboratory hour a week for one semester. Offered on the letter-grade basis only. Prerequisite: Biology 326M, 446L and Nursing 310; credit or registration for Nursing 320.

#### N 325. Adult Health Nursing I.

Discussion of the concepts necessary to promote and restore the health of adults with biological problems; related physiological and psychological responses. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Biology 365S and 165U, Nursing 320, 224, and 127P.

#### N 325P. Adult Health Nursing I (Practicum).

For nursing majors admitted to the professional sequence. Application of the concepts and theories necessary to promote and restore health of adults with biological problems; related physiological and psychological responses. Nine laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Nursing 325.

#### N 227. Conceptual Bases of Aging.

An examination of the theories of aging, the developmental tasks of families, and the physical, psychological, social, economic, ethical, legal, and spiritual needs of aging persons. Responsibilities and needs of caregivers. Two lecture hours a week for one semester. Nursing 320 and 227 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Consent of instructor.

#### N 127P. Clinical Nursing Skills I (Practicum).

Laboratory instruction and practice in clinical nursing skills. Two laboratory hours a week for one semester. Offered on the pass/fail basis only. Prerequisite: Biology 326M and 446L; concurrent enrollment in Nursing 320.

## N 129M, 229M, 329M, 429M, 529M, 629M. International Learning Seminars.

Restricted to students participating in a Maymester Abroad course. Discussion of various issues related to the academic, cultural, and personal aspects of completing academic work in international locations. For each semester hour of credit earned, one lecture hour a week for one semester. Nursing 129M, 229M, 329M, 429M, 529M, 629M and Undergraduate Studies 119 may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: Upper-division standing.

#### N 137, 237, 337. Independent Study.

Study in a specific area; topic and mode of study are agreed upon by student(s) and instructor. The equivalent of one, two, or three lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: A University grade point average of at least 2.80 and consent of instructor.

## N 338. Complementary and Alternative Medicine in Health Care.

Overview of representative Complementary and Alternative Medicine (CAM) modalities and their role in shaping an emerging wellnessoriented, patient-centered model of care. Evaluation of current research evidence of CAM therapies in four domains: mind-body medicine, biologically based practices, manipulative and body-centered therapies, and energy medicine. Includes a hands-on experiential component for familiarization of some fundamental CAM concepts. Three lecture hours a week for one semester. Nursing 347 (Topic: COMPL/ALTERN MED IN HLTH CARE) and Nursing 338 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Upper-division standing.

#### N 147, 247, 347. Specialized Topics in Nursing.

The equivalent of one, two, or three lecture hours a week for one semester; some topics require up to thirty-nine hours of fieldwork a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Enrollment in the upper-division sequence; some topics also require consent of instructor.

Topic 1: Informatics in Health Care and Nursing. **Topic 2: Acute Care Pediatrics.** Topic 3: Cardiovascular Nursing. **Topic 4: Childbearing Nursing Elective.** Topic 5: Critical Care Nursing. Topic 6: High-Risk Maternity. **Topic 7: Pediatrics. Topic 8: Perioperative Nursing. Topic 9: Special Topics in Pediatrics.** Topic 10: Child Wellness Center (Practicum). Topic 11: Children with Chronic Illness in the Community. Topic 12: Clinical Nursing Preceptorship. Topic 13: Community-Oriented Ambulatory Nursing. Topic 14: Genetics in Clinical Nursing (Practicum). Topic 15: Home Health Nursing. Topic 16: Pediatrics in the Community. Topic 17: Well Children in the Community.

#### N 250. Interprofessional Collaborative Practice.

Focuses on developing the competencies needed for interprofessional collaborative practice among health care professionals. Core interprofessional competencies addressed include: values and ethics for interprofessional practice; knowledge of roles and responsibilities of different health professions; interprofessional communication; and teams and teamwork. Two lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Nursing 310; credit or registration for Nursing 320, and 321 or 321H, or consent of instructor.

#### N 354. Spanish for Health Care Professionals.

Basic medical Spanish language skills and phrases related to assessment and nursing activities. Focus on the cultural values of Latino patients who seek health care in the United States. Three lecture hours a week for one semester. Offered on the letter-grade basis only.

#### N 455. Adult Health Nursing II.

Advanced concepts and theories to promote and restore health of adults with biological problems and related physiological and psychological responses. Four lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Nursing 325 and 325P.

#### N 255C. Adult Health Nursing IIA.

First of a two-part sequence in adult health nursing. Advanced concepts and theories to promote and restore health of adults with biological problems and related physiological and psychological responses. Two lecture hours a week for one semester. Nursing 455 and 255C may not both be counted. Offered on the letter-grade basis only. Prerequisite: Nursing 325 and 325P.

#### N 255D. Adult Health Nursing IIB.

Second part of a two-part sequence in adult health nursing. Advanced concepts and theories to promote and restore health of adults with biological problems and related physiological and psychological responses Two lecture hours a week for one semester. Nursing 455 and 255D may not both be counted. Offered on the letter-grade basis only. Prerequisite: Nursing 255C.

#### N 355P. Adult Health Nursing II (Practicum).

Application of advanced concepts and theories to promote and restore health of adults with biological problems and their related physiological and psychological responses. Nine laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Nursing 325P and Pharmacy 338; credit or registration for Nursing 157P and 455 or 255D.

#### N 356. Mental Health Nursing across the Life Span.

Biological, environmental, cultural, and interpersonal factors predisposing individuals across the life span to mental health problems. The course is organized around the nursing process, as well as multidisciplined therapeutic modalities, that assist the individual and family to adapt, recover, and grow through these problems. Current relevant research, and the sociocultural, legal, and ethical implications of providing nursing care to the mentally ill. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Nursing 224; credit or registration for Human Development and Family Sciences 313 and 113L or Psychology 304 and Nursing 325.

## N 256P, 356P. Problems in Mental Health Nursing (Practicum).

Application of strategies for the care of individuals, groups, and families experiencing mental health problems. For 256P, six laboratory hours a week for one semester; for 356P, nine laboratory hours a week for one semester. Nursing 256P and 356P may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Nursing 356.

#### N 157P. Clinical Nursing Skills II Practicum.

Laboratory instruction and practice in clinical nursing skills. Two laboratory hours a week for one semester. Offered on the pass/fail basis only. Prerequisite: Nursing 325P.

#### N 264. Nursing Research.

Basic components of the research process; interpreting descriptive and inferential statistics in research. Critical examination of research studies in nursing. Two lecture hours a week for one semester. Nursing 264 and 264H may not both be counted. Prerequisite: Introductory statistics course (such as Statistics and Data Sciences 302) and Nursing 320, or consent of instructor.

#### N 264H. Nursing Research: Honors.

Examination of the research process and methods, along with interpretation of descriptive and inferential statistics in research. Critical examination of research studies in nursing and research skills through participation in a research project. One and one-half lecture hours and one laboratory hour a week for one semester. Nursing 264 and 264H may not both be counted. Prerequisite: Admission to the School of Nursing Honors Program and an introductory statistics course, or consent of instructor.

#### N 265. Nursing Care of Childbearing Families.

Concepts, theories, and processes essential to understanding the health concerns and problems of women and their families during the childbearing years. Two lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Nursing 325, 325P, 356, and 256P or 356P; credit or registration in Nursing 157P and 455 or 255C.

#### N 365P. Nursing Care of Childbearing Families Practicum.

The application of concepts, theories, and processes pertinent to care of women and their families during the childbearing years. Nine laboratory hours a week for one semester. Prerequisite: Credit or registration for Nursing 265.

#### N 266. Nursing Care of Children and Their Families.

Concepts, theories, and developmental processes essential to the health concerns and problems of children, adolescents, and their families. Two lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Human Development and Family Sciences 313 and 113L or Psychology 304, Nursing 356, 356P or 256P, Pharmacy 338; and credit or registration in Nursing 355P and 255D or 455.

#### N 366P. Nursing Care of Children and Their Families Practicum.

Application of concepts, theories, and developmental processes essential to the health concerns and problems of children, adolescents, and their families. Nine laboratory hours a week for one semester. Prerequisite: Nursing 157P; credit or registration for Nursing 266.

#### N 371. Disability over the Life Course.

An interdisciplinary introduction to the study of disability as a distinct social and clinical concept with practical and theoretical implications for health care. Focus on the changing needs of persons with disabilities over the life course. Explores how to understand the health needs of persons with disabilities and how to work with them and their families so they may negotiate environments with appropriate accommodations that meet their health care needs. Three lecture hours a week for one semester. Nursing 347 (Topic: DISABILITY OVER THE LIFE COURSE) and Nursing 371 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Upper-division standing.

#### N 273. Quality and Safety for Nursing Practice.

Designed to prepare students for professional nursing practice. Provides opportunities for synthesis of theoretical, evidence-based, and clinical knowledge with emphasis on quality care and patient safety. Two lecture hours a week for one semester. Nursing 273 and 278 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Nursing 321 or 321H and credit or registration in Nursing 264, or consent of instructor.

#### N 274. Complex Nursing Care.

Addresses the management of complex and critical needs of patients and their families across the continua of care. The focus will be on people with multiple chronic conditions experienced by various populations such as age groups, disease/health conditions, and settings. In addition, transitional care, critical care concepts, palliative, and endof-life care will be explored. Two lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Nursing 255D, 455, 355P, 266, 366P; credit or registration in Nursing 277P.

#### N 275. Public Health Nursing.

Presents public health nursing concepts, theories, and processes used in health promotion, disease or injury prevention, health protection, and risk reduction with individuals, families, groups, communities, and populations. Two lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Nursing 455 or 255D, 355P, 356, 256P or 356P, 265, and 266; or consent of instructor.

#### N 375P. Public Health Nursing Practicum.

Application of public health nursing concepts, theories, and processes used in health promotion, disease or injury prevention, health protection, and risk reduction with individuals, families, groups, communities, and populations. Nine laboratory hours a week for one semester. Prerequisite: Credit or registration for Nursing 275.

#### N 377. Leadership and Management of Nursing Care.

Selected concepts and theories of management in the context of the delivery of dynamic nursing care. Use of management concepts in working with a health care team to provide high-quality patient care. Historical development of the health care system, current issues, contemporary trends, standards of professional practice, management and leadership roles, political and cultural influences on health care, and professional career development. Three lecture hours a week for one semester. Nursing 377 and 377H may not both be counted. Prerequisite: Nursing 325 or consent of instructor.

## N 377H. Leadership and Management of Nursing Care: Honors.

Examination of selected concepts and theories of management and leadership in the context of the delivery of dynamic nursing care. The use of management concepts in working with a health care team to provide high-quality patient care. Current economic, social, and political factors that influence health care. Three lecture hours a week for one semester. Nursing 377 and 377H may not both be counted. Prerequisite: Admission to the School of Nursing Honors Program or consent of instructor.

#### N 277P, 377P. Clinical Care Management Practicum.

Application of selected concepts and theories of management in the planning and delivery of health care. For 277P, six laboratory hours a week for one semester; for 377P, nine laboratory hours a week for one semester. Nursing 277P and 377P may not both be counted. Offered on the letter-grade basis only. Prerequisite: Nursing 265, 365P, 266, and 366P; and credit or registration in Nursing 377 or 377H.

#### N 279P. Capstone Preceptorship.

Designed to provide students with clinical experiences similar to those that confront newly employed registered nurses. Focuses on the role transformation of students and on clinical competence in communication, collaboration, negotiation, delegation, coordination, and evaluation of interdisciplinary work. Thirty to forty hours a week for three to four weeks for a total of 120 clinical hours. Additional preparation time to assure clinical competence may be required. Offered on the pass/fail basis only. Prerequisite: Nursing 377 or 377H, and 277P or 377P.

# **College of Pharmacy**

M. Lynn Crismon, PharmD, Dean W. Renee Acosta, MS, Associate Dean Diane B. Ginsburg, PhD, Associate Dean John H. Richburg, PhD, Associate Dean Bryson M. Duhon, PharmD, Assistant Dean Jennifer L. Ridings-Myhra, M Ed, Assistant Dean http://pharmacy.utexas.edu/

## **General Information**

## Accreditation

The College of Pharmacy has been a member of the American Association of Colleges of Pharmacy since 1927. The Doctor of Pharmacy degree program is accredited by the Accreditation Council for Pharmacy Education (ACPE); ACPE does not accredit master's and Ph.D. degrees in pharmacy.

## Mission

The University offers a four year Doctor of Pharmacy (Pharm.D.) as the sole entry-level, professional degree for the practice of pharmacy. Competitive admission to the program occurs after the completion of a series of required prepharmacy courses. This program offers a course of study in the biomedical, pharmaceutical, clinical, and social and behavioral sciences designed to provide the state and the nation with pharmacists who are scientifically educated and clinically competent to deliver a full spectrum of pharmaceutical services in all areas of practice. In meeting its teaching obligation, the college provides a curriculum and faculty that offer students an educational experience beyond training solely for the practice of pharmacy.

The profession of pharmacy has evolved from a role primarily in distribution of medication toward a patient-centered care model. The patient-centered care model is a process through which a pharmacist interacts with the patient and other health care professionals collaboratively in the collection, assessment, planning, implementation, and follow-up of a patient-specific therapeutic plan that will produce the desired therapeutic outcomes. To ensure that graduates have the necessary tools to practice in this complex, patient-centered environment, the pharmacy curriculum has evolved from traditional discipline-specific coursework to a discipline-integrated approach of disease state management and a case-based, team approach to the design of the patient-specific therapeutic plan that includes interprofessional collaborative practice.

The professional curriculum is designed to prepare pharmacy graduates to provide patient-centered pharmaceutical care in a contemporary interprofessional collaborative practice setting, whether a community pharmacy, an ambulatory clinic, a hospital, managed care, or a longterm care facility, as well as to work in the pharmaceutical industry. In addition, the curriculum aims to inculcate an understanding of the basic sciences sufficient to prepare the student for graduate study in the pharmaceutical sciences or post Pharm.D. residency training. These objectives are pursued through a balanced program of study in pharmaceutics, medicinal chemistry, pharmacology, therapeutics, pharmacy administration, social and behavioral sciences, and the humanities, as well as a structured clinical and professional practice experiential program. The holder of a professional degree from The University of Texas at Austin has received an education and training as sophisticated as any available in the health professions. The College of Pharmacy has conducted a joint Pharm.D. degree program with the University of Texas Health Science Center at San Antonio since 1974. Students who complete their P3 and P4 experiential courses at the Health Science Center are considered part of this program and receive a degree awarded jointly by the two institutions.

The college has educational affiliations with several other academic health institutions, health-systems, and pharmacy organizations through its five Texas regional internship areas - Austin/Temple/Waco, Dallas/Ft. Worth, Houston/Galveston, the Rio Grande Valley, and San Antonio.

The college seeks to encourage the belief that education is ongoing and lifelong and that all levels of professional education must form a continuum with professional practice and patient care. To meet this objective, the college provides postgraduate educational programs and develops innovative programs of training through continuing education for the roles pharmacists may be called on to fill as a result of changes in the patterns of delivery of pharmaceutical services.

In addition to the Pharm.D. degree, the University offers the Master of Science in the Pharmaceutical Sciences, and the Doctor of Philosophy (Ph.D.) with a major in the Pharmaceutical Sciences. The College of Pharmacy also participates in interdisciplinary Ph.D. programs in Cellular and Molecular Biology and in Neuroscience. In collaboration with The University of Texas Health Science Center at San Antonio and The University of Texas at San Antonio, the College offers an interinstitutional Ph.D. program with a major in Translational Science. These programs are described in the *Graduate Catalog* (http://catalog.utexas.edu/ graduate/fields-of-study/pharmacy/pharmacy).

## History

For more than a century, the University's College of Pharmacy has provided education and training for men and women as pharmacy practitioners, scientists, professional leaders, and responsible citizens. Eleven students constituted the first class when a school of pharmacy was created in the fall of 1893 at the University of Texas Medical Branch at Galveston. In 1927, the program was reorganized as the College of Pharmacy and moved to the Austin campus. The college shared quarters with other University programs until 1952, when the first pharmacy building was opened. Instruction now takes place in facilities designed for the pharmacy program and located near the center of the Austin campus, and on the campus of the University of Texas Health Science Center at San Antonio.

The first undergraduate program consisted of two sessions, each seven months in length. The current Pharm.D. degree program requires six years in pre-professional subjects, biomedical and pharmaceutical sciences, and professional experience courses. Graduate study became available in 1948 with the institution of a Master of Science in Pharmacy degree program. Today programs are also available that lead to the Doctor of Philosophy in the pharmaceutical, administrative, and clinical sciences. More than 8,000 students have graduated from the programs offered by the college; many have achieved state, national, and international prominence in pharmacy or in related health fields.

Academic leadership for pharmaceutical education at the University has been provided by eleven prominent educators, beginning with James Kennedy of San Antonio, who was appointed as a pharmacy professor and director of the Galveston program in 1893. He was succeeded by R. R. D. Cline, who for almost thirty years guided pharmaceutical education in Texas. When the school was moved to Austin in 1927, W. F. Gidley was named the first dean of the college. In 1947, Henry M. Burlage succeeded Professor Gidley as dean. He was succeeded in 1962 by Lee F. Worrell, who served until 1966. Carl C. Albers was acting dean until Joseph B. Sprowls was appointed dean in 1967. William J. Sheffield became acting dean upon the death of Professor Sprowls in 1971. He was succeeded in 1973 by James T. Doluisio, who served the college for 25 years. Steven Leslie served as dean from 1998 until 2007, when M. Lynn Crismon assumed the leadership of the college.

University pharmacy students receive instruction in the basic biomedical sciences, the pharmaceutical sciences, pharmacy administration, and pharmacy practice in state-of-the-art academic and health care facilities. Pharmacy interns expand their professional practice knowledge and skills at clinical education sites in the Austin/Temple/Waco area, University of Texas Health Science Center at San Antonio, the University of Texas Southwestern Medical Center at Dallas, the Texas Medical Center in Houston, and The University of Texas Medical Branch at Galveston.

## Facilities

## The Pharmacy Building

In addition to well-equipped classrooms, laboratories, and offices, the pharmacy building provides a learning resource center, a television production laboratory and classrooms, and pharmaceutical technology laboratories with facilities for product development, pilot manufacturing, sterile production and quality control, and stability testing. The University Health Services Pharmacy also serves as a teaching laboratory for second-year pharmacy students while providing comprehensive pharmaceutical services to the student community. Space assigned to the college in the Biomedical Engineering Building and the Dell Pediatric Research Institute expands pharmacology, medicinal chemistry, and pharmaceutics research space.

## Pharmacy Facilities in San Antonio

The University of Texas Health Science Center at San Antonio has provided facilities for the education and training of pharmacy students, residents, and fellows since 1972. The McDermott Clinical Sciences Building on the Health Science Center campus, which houses the pharmacotherapy division of the college and the Pharmacotherapy Education and Research Center, provides a state-of-the-art distance education classroom, a student computer laboratory, research laboratories, and offices for faculty and staff members. The Division of Pharmacotherapy maintains a broad range of affiliation agreements with institutions in San Antonio that provide extensive training opportunities in a variety of practice settings. Research opportunities exist in the areas of infectious disease, oncology, anticoagulation, stroke prevention, and psychiatry.

## **Office of Pharmacy Continuing Education**

As part of a state university, the College of Pharmacy recognizes obligations to the profession of pharmacy on a state, national, and international level. The college began providing continuing education to pharmacists in 1953 in cooperation with the University's Division of Extension (http://www.utexas.edu/ce/uex). Today, the college is an ACPE-approved provider of continuing pharmaceutical education. A primary goal of the Office of Pharmacy Continuing Education is to advance the pharmacist's knowledge and provide the skills necessary to adapt to a changing practice. Toward this end, the office offers a variety of programs, including home-study courses, seminars, multiday conferences, and certificate programs addressing the most current practice issues. Programs are conducted both on and off campus and by correspondence and distance learning. Annually, the office provides about 350 contact hours of continuing education programming to more than 6,500 pharmacists across the United States.

## Learning Resource Center

The college's Learning Resource Center (http://sites.utexas.edu/ phr-lrc) (LRC) offers a variety of instructional resources to students and faculty members. The LRC provides state-of-the-art digital video teleconferencing transmission of courses among the Austin campus, the Health Science Center at San Antonio, and other sites in the University of Texas System, so that faculty members can teach students at two or more locations simultaneously. Most courses are recorded and made available by video streaming. The LRC also operates the Delgado Library, a multipurpose, nontraditional facility with individual and small-group study spaces, and seminar rooms.

The staff of the LRC provides faculty members and students with computer hardware and software consulting as well as advice on the use of media in the classroom. Facilities and equipment are available for video and data projection. The College of Pharmacy's website (http://www.utexas.edu/pharmacy) provides additional information and curriculum support for students and faculty members.

The electronic classrooms feature desktop computers with projection equipment and a full suite of software. The large distance-learning classroom supports notebook computer ports. Wireless high-speed Internet is available throughout the Pharmacy Building.

The goal of the Learning Resource Center is to provide the highest quality learning technology infrastructure and support services to students and faculty members.

### Libraries

The Life Science Library supports the teaching and research missions of the College of Pharmacy by providing access to an extensive array of print and electronic information resources. The library maintains extensive holdings in pharmacology, pharmaceutics, pharmacy administration, and medicinal chemistry, with supporting materials in medicine and nutrition. Biochemistry and medicinal chemistry material is complemented by the collections of the Mallet Chemistry Library. Medical material is supplemented by additional material in nursing, pediatrics, and psychiatry at the Perry-Castañeda Library. Extensive collections in the social sciences and business provide additional support for the interdisciplinary interests of health outcomes and pharmacy practice. Current journal holdings are primarily online, while books are acquired in print or digitally as eBooks.

The online Clinical Information Center (ClinIC), sponsored by the Life Science Library, provides electronic access to the complete resources of a drug information center. The center gives users access to significant electronic resources such as Micromedex, Access Pharmacy, PharmacyLibrary, AHFS Drug Information, Clinical Pharmacology online, Drug Facts & Comparisons, LexiComp online, and the Cochrane Library of evidence-based reviews, in addition to databases such as Medline, International Pharmaceutical Abstracts. Web of Science, and SciFinder Scholar. These electronic resources are available for remote access through the University Libraries website (http://www.lib.utexas.edu), which offers a full range of databases, access to electronic journals, and links to other digital information sources. The libraries collaborate with the College of Pharmacy to select and integrate electronic resources into the pharmacy curriculum. Access to print information resources for students on rotation and at the College of Pharmacy Cooperative Program campus is provided through the University Libraries InterLibrary Services.

All units of the University Libraries offer reference service, circulation and reserve services, and interlibrary loan. Instruction in the use of information resources is provided in required pharmacy classes and by individual consultation.

# Financial Assistance Available through the College

Students entering the first year of the professional curriculum may be eligible for certain college-based scholarships, and information is provided to students regarding these scholarships upon matriculation. Students who have completed the first year of the professional curriculum are eligible to apply for all scholarships and loans offered through the College of Pharmacy. Eligibility and application information is available at http://pharmacy.utexas.edu/students/financial-aid/ and in the Office of Student Affairs, Pharmacy Building 5.112.

Scholarship opportunities with the College of Pharmacy include Endowed Presidential Scholarships with a minimum of \$2,500, and other endowed scholarships with a minimum of \$1,500. Students must meet eligibility requirements, and in some cases additional criteria, to be awarded these scholarships. Additional college scholarships are funded by various pharmacy associations, individuals, employers, and organizations. These scholarships are awarded, as they become available, through The University of Texas College of Pharmacy at the direction of the college's Financial Aid Committee.

## Loan Funds

### The Klinck Family Loan Funds

These loan funds were established by the Klinck family of McAllen, Texas, to assist students in need of financial assistance. Emergency loans, for a maximum of \$1000 are available; they normally are repayable within 90 days. Long-term loans of up to \$2,500 are available to pharmacy students who demonstrate financial need. The interest rate for these loans is six percent. Repayment begins three months after the student's graduation from pharmacy school, or once the student is no longer enrolled in the pharmacy program. Students may apply for more than one loan, but except in unusual circumstances the loans will total no more than \$5,000. Additional information is available in the Office of Student Affairs, Pharmacy Building 5.112.

#### **Other Loan Funds**

Other loan funds may be available to pharmacy students. Information about these loans is available from the Office of Student Affairs, Pharmacy Building 5.112.

## **Student Services**

## **Academic Advising**

Academic and career advising are ongoing activities of the Office of Student Affairs, Pharmacy Building 5.112. Because advising is not restricted to the time just before registration, all students are strongly encouraged to seek advice whenever they need it about degree requirements, the availability of course offerings each semester, and taking courses in proper sequence.

Advising for pre-pharmacy students at the University is provided by assigned academic advisers in their colleges and by the Health Professions Office in the College of Natural Sciences. University students interested in the profession of pharmacy should contact their office early in their college careers.

Pre-pharmacy students from outside the University should seek information from our College of Pharmacy website (http:// www.utexas.edu/pharmacy), from their institutional academic advisers or Health Professions Office, and from an admissions representative from the College of Pharmacy.

### **Career Services**

The college provides career counseling to students in the professional sequence of courses. Throughout the year, staff is available in the Office of Student Affairs to assist students in examining the career options available to them upon graduation.

In addition, a systematic exploration of professional career options is conducted as part of the foundations for professional development series of courses. Guest lecturers include successful pharmacists representing a variety of pharmacy practice models, other health care and regulatory settings, and careers in professional organizations, education, research, and the pharmaceutical industry.

The College of Pharmacy, under the supervision of the assistant dean for student success, conducts a P4 senior interview day for graduating seniors. This event gives seniors an opportunity to interview for professional practice positions with major employers of pharmacists in Texas and throughout the nation. A workshop including mock interviews is conducted to prepare students for interviews and is held prior to the P4 senior interview day as a part of Senior Conference. A college-wide Career Day each fall, featuring major employers, allows students in all years of the curriculum to interact with numerous pharmacist employers and explore practice opportunities.

The college also facilitates interaction between employers and professional students interested in obtaining competitive internships. More information on this process is provided to all students during the first professional year.

A limited number of competitive internships both in and outside of Texas are available by application only. Information is available in the Office of Student Affairs, Pharmacy Building 5.112; from individual faculty members; and via the student's own internship search.

As a complement to the assistance available from the college, the University's Vick Center for Strategic Advising and Career Counseling in the School of Undergraduate Studies provides comprehensive career services to all students. The center offers professional assistance to students in choosing or changing their majors or careers, seeking an internship, and planning for a job search or graduate study.

The University makes no promise to secure employment for each graduate.

### **Student Organizations**

## American Association of Pharmaceutical Sciences (AAPS)

The University of Texas at Austin Student Chapter of AAPS was initiated in 2003 with the primary goal of increasing awareness of educational and career opportunities in the pharmaceutical sciences among The University of Texas at Austin College of Pharmacy students. The organization fosters participation at the national AAPS Annual Meeting and Exposition.

## American Pharmaceutical Association Academy of Students of Pharmacy (UT-APhA-ASP)

In December, 1951, the Longhorn Pharmaceutical Association was organized as an association jointly representing the student branches of the American Pharmaceutical Association and the Texas Pharmaceutical Association. Renamed in 1998, the association sponsors service projects and social events and serves to develop professionalism in pharmacy students.

### Asian Pharmacy Students Association (APSA)

The mission of the Asian Pharmacy Students Association, established at the University in 1999, is to promote unity among pharmacy students who have common interests, values, and backgrounds, in order to help them achieve educational, professional, and personal excellence.

## Christian Pharmacists Fellowship International (CPFI)

This group seeks to identify and enroll all Christian pharmacists, wherever they practice, and to assist them in creating opportunities for fellowship. CPFI is the first international organization of evangelical Christian pharmacists established with a focus on integrating the spiritual and vocational dimensions of the pharmacist's role.

### Kappa Epsilon (KE)

Kappa Epsilon is a national professional fraternity established to promote careers for women in pharmacy, but membership is open to women and men. Xi chapter, established in 1943, sponsors service and professional projects, including a focus on breast cancer awareness, poison prevention working with elementary schools, as well as social events and other extracurricular activities.

### Hispanic Association of Pharmacists (HAP)

The primary goals of the Hispanic Association of Pharmacists are to assist in the recruitment and retention of qualified students in the College of Pharmacy, to provide health care education to the community, and to maintain open communication channels between students and the college. Membership is open to prepharmacy and professional students.

### **Pharmacy Council**

The Pharmacy Council is composed of officers and representatives of the sponsored student organizations in the College of Pharmacy and elected student representatives from each of the professional pharmacy classes. The president, financial director, and senate representative of the council are also members of the Senate of College Councils, and a member of the council serves as the college's representative to Student Government. Acting as liaison between the student body and the Office of the Dean, the Pharmacy Council works to ensure the equitable consideration of student concerns and problems. The council sponsors orientation programs for new pharmacy students, college and Universitywide programs, events that promote student and faculty interaction, and community service activities for medically underserved citizens throughout the state.

## Pharmacy Graduate Students' Association (PGSA)

This association conducts activities that promote the general welfare of pharmacy graduate students. Its chief purposes are to encourage and facilitate graduate student communication and interaction; to gather and disseminate information important to pharmacy graduate students; to represent pharmacy graduate students to the University community; and to promote pharmaceutical education at the undergraduate level.

### Phi Delta Chi (PDC)

Lambda chapter of Phi Delta Chi, established at the University in 1905, was reactivated in 1956. Phi Delta Chi is a professional pharmaceutical fraternity of national standing. Membership is open to qualified professional students who are interested in promoting leadership, scholarship, and professional ethics in the field of pharmacy.

### Phi Lambda Sigma (PLS)

Psi chapter of Phi Lambda Sigma, the national pharmacy leadership society, was established at the University in 1989. Students selected for membership must be of high moral and ethical character, must have demonstrated dedication, service, and leadership in the advancement of pharmacy, must have completed at least 90 semester hours of scholastic work, and must be in good academic standing as defined by the College of Pharmacy.

### Rho Chi

Nu chapter of Rho Chi, the national pharmaceutical honor society, was established at the University in 1930. Charters for chapters of this organization are granted only to groups in colleges that are members in good standing of the American Association of Colleges of Pharmacy. Eligibility for membership in the society is based on scholarship, character, personality, and leadership. Students selected for membership must have a pharmacy grade point average of at least 3.20, must be in the top 20 percent of their class, and must have completed the first professional year of the pharmacy curriculum. All candidates must be approved by the Dean of the College of Pharmacy.

## San Antonio Student Pharmacists Association (SASPA)

The San Antonio Student Pharmacists Association (SASPA) was formed in the spring semester of 2010. This organization serves as a venue to bring The University of Texas at Austin College of Pharmacy students located in the San Antonio region together to impact the community and to promote the profession of pharmacy.

### **Student Industry Pharmacists Organization (IPhO)**

This group's mission is to advance the experience of student pharmacists interested in industry careers by promoting knowledge, resources, academic support, and employment opportunities.

#### Student Pharmacist Recovery Network (SPRN)

The Students of Pharmacy Recovery Network (SPRN) is a program for pharmacy students at the University of Texas designed by conscientious students, faculty members, and staff members of the College. The purpose of the SPRN is to act as a concerned intermediary by assisting pharmacy students having personal problems including emotional stress, alcohol or other drug abuse problems, or a combination of these. SPRN students, faculty, and staff members are able to refer others to the appropriate University and Austin resources that best address their particular needs.

### **Texas Coalition of Student Pharmacists (TCSP)**

This group's mission is to be committed to promoting pharmacists as competent health care professionals, increasing the awareness for improved patient access to pharmacist care, and advocating on behalf of pharmacy for the betterment of our patients.

#### UT Chapter, International Society of Pharmacoeconomics and Outcomes Research (UT-ISPOR)

This group's mission is to provide an environment in which students can share knowledge in pharmacoeconomics and health outcomes research. It brings together students of pharmacoeconomics and outcomes research and members of the pharmaceutical industry, healthrelated organizations, and academia; acts as a resource for students interested in pharmacoeconomics and outcomes research; and provides an opportunity for students to become familiar with the work of ISPOR and to be represented in its affairs.

# UT Chapter, National Community Pharmacists Association (NCPA)

NCPA is a national professional organization representing the interests of independent community pharmacists. The student chapter sponsors projects and events designed to foster the entrepreneurial spirit among future practitioners. The national association has a loan program available to student members, as well as several competitive scholarships and research grants.

## UT Chapter, National Pharmaceutical Association (SNPhA)

The purpose of the SNPhA is to plan, organize, coordinate, and execute programs geared toward the improvement of the health, educational, and social environment of the minority community.

# UT Student Chapter of the American College of Clinical Pharmacy (UT-SCCP)

The mission of SCCP is to adopt the purposes of the American College of Clinical Pharmacy. SCCP is focused on giving students exposure to clinical pharmacy, research, and academia. Students have opportunities to hear from and research with many different clinical pharmacists and researchers.

### University of Texas Student Society of Health-System Pharmacists (UTSSHP)

The student chapter of the Texas Society of Health-System Pharmacists is an organization for students interested in institutional or healthsystem pharmacy practice. An affiliate of the American and Texas Societies of Health-System Pharmacists, the organization considers a wide range of topics of interest to health professionals and encourages the broadest possible educational introduction to institutional pharmacy and pharmaceutical care. This introduction includes presentation of programs and seminars, tours of pharmacy practice sites, and distribution of literature. The chapter publicizes job openings in hospital pharmacies across the state.

### Longhorn Prepharmacy Association (LPPA)

LPPA comprises all prepharmacy students at The University of Texas at Austin. The group's chief objectives are to function as a small community of students within a large institution; to provide current information on the preprofessional and professional curricula; and to provide information about the pharmacy profession.

# Legal Requirements for Professional Practice

Upon matriculation to the first professional year in the College of Pharmacy, each student must apply to become an intern trainee with the Texas State Board of Pharmacy (http://www.tsbp.state.tx.us). Each student must be registered as an intern trainee, and subsequently as a student-intern, in order to acquire, through pharmacy courses, the internship hours necessary for licensure upon graduation as a pharmacist in Texas.

Students should be aware that the process of registration as an intern includes a criminal history and fingerprint check. The existence of a criminal record may preclude the student from registration as an intern, completion of experiential courses in the curriculum, and/or from subsequent licensure as a pharmacist in Texas. However, the Texas State Board of Pharmacy may grant limited internship status under certain conditions to those with prior convictions. It is possible that health care facilities in which students are placed for experiential coursework may mandate an additional background check and/or drug

screen. Students assigned to these facilities must comply with all such requirements. If a student cannot be placed in practice facilities because of prior convictions that appear on any background check, or because of a positive drug screen, his or her graduation may not be possible or may be significantly delayed.

After completing the first professional year (at least 30 semester hours), students registered as student-interns may earn internship hours toward licensure not only through professional sequence pharmacy courses but also outside the academic program through employment in certain practice settings. Internship hours gained outside the College of Pharmacy curriculum may not replace any portion of the experiential program required for graduation.

Students are required to inform the Student Affairs Office of any change in status that may affect intern registration or the ability to be placed in practice (experiential) sites.

Graduates of the College of Pharmacy are eligible to apply to the Texas State Board of Pharmacy for licensure as pharmacists. Licensure exams may be taken shortly after graduation. Postgraduate internship experience is not currently required for Texas licensure but may be required for licensure in other states.

Additional information about requirements for pharmacy licensure in Texas is available from the Texas State Board of Pharmacy. (http://www.tsbp.state.tx.us)

Intern registration and pharmacist licensure requirements are subject to change by the Texas State Board of Pharmacy. Students and graduates must meet current requirements, even if they differ from those described above.

## **Graduate Degrees (Research)**

Graduate programs leading to the Master of Science in the Pharmaceutical Sciences and the Doctor of Philosophy in the Pharmaceutical Sciences are offered through the Graduate School and described in the *Graduate Catalog* (http://catalog.utexas.edu/ graduate/fields-of-study/pharmacy/pharmacy). The graduate student may specialize in medicinal chemistry, pharmacology and toxicology, pharmaceutics, pharmacotherapy, pharmacy administration, or translational science. Faculty members in each area work closely with students and engage in research in such fields as drug synthesis, pharmacokinetics, drug mechanisms and toxicity, and clinical research.

## Admission and Registration

## Admission

## Admission to the University

For the College of Pharmacy's Pharm.D. program, admission and readmission are the responsibility of the dean of the College as delegated by the University's director of admissions. Students accepted to the Pharm.D. Program will be processed for admission to the University (if not already enrolled at The University of Texas at Austin).

## Admission to the Professional Curriculum

Admission to the University in no way implies or guarantees admission to the professional curriculum. No student may begin the professional curriculum until he or she has been admitted to the professional curriculum in pharmacy by the dean, following recommendation by the Admissions Committee of the College of Pharmacy, according to the procedures outlined in this section regarding admission. All students must meet the admission requirements given in the catalog in effect at the time of application. If the number of eligible applicants to the professional curriculum exceeds the number that available facilities can accommodate, final selection is made by the college Admissions Committee and the dean.

The College of Pharmacy uses PharmCAS, the national Pharm.D. application system. All student applications must go through PharmCAS, and those accepted for enrollment in the college will be processed for direct admission to the University.

Students who are enrolled in a pharmacy program at another institution and who wish to transfer to the University should follow the normal Pharm.D. application process. Upon admission to the University and the professional curriculum, the student may request advanced standing in the pharmacy curriculum. Placement is contingent on availability of space and on transcript evaluation to determine University equivalencies for the student's coursework.

As a condition of admission to the college, each student must sign a statement that he or she agrees to accept assignment to any one of the college's experiential (internship) regions throughout the state. Cooperative arrangements for pharmacy education exist with academic units and health care institutions in the following internship regions: Austin/Temple/Waco, Dallas/Fort Worth, Galveston/Houston, and San Antonio. Experiential regions may be added or deleted at any time based on the availability of resources.

Students assigned to San Antonio must spend the last two years of the professional program in that regions. Students assigned to the other regions spend only the final year of the program (the fourth professional experiential year) in their assigned region.

Students are assigned to experiential regions through a computergenerated random assignment system that takes students' ranked preferences into account. Since most students relocate to experiential regions outside the Austin area, region assignment occurs during the latter part of the first professional year to allow students adequate time to make personal and financial arrangements. There are no exceptions to the region assignment process. If a student fails to agree to accept assignment to any region, he or she will not be admitted to the college.

#### Admission to the First Professional Year

Admission to the professional curriculum is competitive. The application process is conducted via the national Pharm.D. admissions program, PharmCAS, as specified on the PharmCAS website (http:// www.pharmcas.org) and linked via the College of Pharmacy (http:// sites.utexas.edu/pharmacy-admissions).

#### **Basic Admission Criteria**

- Scholarship, as indicated by grade point average and Pharmacy College Admission Test (PCAT) scores, including writing sample scores, are submitted via PharmCAS. Scores more than three years old are not accepted.
- 2. Essay as specified in the PharmCAS application process.
- Letters of recommendation submitted via PharmCAS from people who know the applicant well professionally, especially pharmacist employers.
- 4. Transcripts of all academic work submitted via PharmCAS.
- 5. A résumé submitted via PharmCAS that provides details about the applicant's professional, organizational, volunteer, and service experience.

#### **Additional Personal Factors**

The information specified below is submitted either via PharmCAS or through the college's supplemental application.

- 1. Pharmacy and other related work experience
- 2. Organizational, service, and volunteer activities that demonstrate community involvement and leadership potential
- 3. Teaching, tutoring, and mentoring experience
- 4. Research experience
- 5. Honors and awards
- 6. Interview. Applicants are screened for interviews based on academic record, direct work experience in the profession, special life circumstances, and any other compelling factors. If the applicant is invited for an interview, then other factors are considered; these include but are not limited to the following:
  - a. Knowledge of and motivation for pharmacy as a career
  - b. Lifelong learning strategies
  - c. Critical thinking skills
  - d. Communication skills
  - e. Compassion and commitment to care
  - f. Respect toward others
  - g. Organizational efficiency
  - h. Integrity and ethical reasoning
  - i. Relationship-building skills
  - j. Leadership skills
  - k. Teamwork
- 7. Special life circumstances; these include but are not limited to the following:
  - a. Single parent
  - b. Socioeconomic status of family
  - c. First generation attending college
  - d. Overcoming adversity
  - e. Resident of an underserved area of the state or an area of Texas with a health professions shortage
  - f. Race and ethnicity
  - g. Cultural background

Because the University is a public institution, preference is given to applicants who are legal residents of Texas and to applicants from states without colleges of pharmacy. Applicants are strongly encouraged to examine the admission statistics published by the college on its admissions website (http://sites.utexas.edu/pharmacy-admissions).

### **Application Deadlines**

The deadline to apply for admission to the college is specified on the PharmCAS website (http://www.pharmcas.org) and linked via the College of Pharmacy (http://sites.utexas.edu/pharmacy-admissions/im-ready-to-apply).

#### **Admission Requirements**

- 1. The applicant must have completed at least 66 semester hours in total, and must have completed the following 45 hours in prerequisite courses prior to enrolling in the professional pharmacy curriculum:
  - a. Nine hours of biology, including cellular and molecular biology, structure and function of organisms, and genetics
  - b. Eight hours of general chemistry with laboratory
  - c. Three hours of freshman-level rhetoric and writing
  - d. Three hours of sophomore-level survey of American, British, or world literature
  - e. Three hours of calculus
  - f. Three hours of statistics
  - g. Eight hours of organic chemistry with laboratory

h. Four hours of microbiology with laboratory

i. Four hours of physics with laboratory The remaining 21 semester hours should be from the Core Curriculum (p. 23).

2. The applicant must remove all deficiencies in high school units by the means prescribed in *General Information* before seeking admission to the professional curriculum.

### **Admission Procedures**

- 1. All applications for the Pharm.D. program will be handled through the national Pharm.D. admissions system, PharmCAS. Students must adhere to the deadlines for admission specified. The PharmCAS application process will include a supplementary application to the college (with a nonrefundable supplementary application fee) necessary to acquire additional academic information for University admission. Candidates will be notified if additional information is required.
- 2. Selected applicants will be asked to appear for a personal interview. The personal interview will follow a multiple-mini interview (MMI) format.
- 3. The applicant is considered on the basis of overall academic performance, with emphasis on grades in the required Pharm.D. prerequisite courses. In accordance with University policy, courses in which the applicant earned a grade of *D+*, *D*, *D-*, or *F* at another institution are not transferable and may not be used to fulfill any degree requirements. However, courses in which the student earned a grade of *D+*, *D*, or *D-* are considered when the student's admissibility to the professional curriculum is determined.
- 4. Applicants who have been offered admission to the University and to the Pharm.D. program will be asked to pay a nonrefundable enrollment deposit to the University. If the student does enroll in the program that fall, the deposit will be applied to the semester's tuition bill.
- 5. All students accepted for admission in the Pharm.D. program will be processed for admission to The University of Texas using the information in the PharmCAS application. Additional materials for University admission may be required:
  - a. A high school transcript, if the applicant's foreign language requirement was completed in high school. Official transcripts must be sent to the University's Office of Admissions (https:// www.utexas.edu/student/admissions).
  - b. Scores on the Texas Higher Education Assessment (THEA) test (or an appropriate assessment test), if and only if the student is required by state law to take this test.
  - c. Credit earned by examination. These reports should be sent directly to the Testing and Evaluation Services— Student Testing Services (http://ctl.utexas.edu/services/ student\_testing\_services) at the University. This would be done if and only if the student had not previously claimed credit showing on the transcript.
  - d. Official transcripts for all colleges/universities attended.
- 6. An applicant who has been admitted to the University and to the professional curriculum but fails to enroll in either, and who wishes to enter the professional curriculum in a subsequent fall semester, must reapply both to the University and to the College of Pharmacy and must meet all requirements in force at the time of reapplication.
- 7. An applicant who has been admitted to and enrolls in the professional curriculum but subsequently withdraws, and who wishes to reenter in a subsequent fall semester, must apply for readmission to the professional curriculum and must meet all requirements in force at the time of reapplication. A student who has

been out of the University for a semester or more must also apply for readmission to the University.

## **Technical Standards**

"Technical standards" are the observational, communication, sensory/ motor, and intellectual skills, the behavioral and social attributes, and the ethical values required for the completion of the professional curriculum and for the practice of pharmacy. These standards are described on the College of Pharmacy's website (http://pharmacy.utexas.edu/ students/programs-of-study/pharm-d-program/technical-standards-forpharmacy-education). Each applicant must attest that they have read and understand the technical standards. Any applicant who believes he or she may have difficulty meeting them should contact the college's director of admission.

## Registration

*General Information* (http://registrar.utexas.edu/catalogs/generalinformation) gives information about registration, adding and dropping courses, transfer from one division of the University to another, and auditing a course. The *Course Schedule* (http://registrar.utexas.edu/ schedules) published before registration each semester and summer session, includes registration instructions, advising locations, and the times, places, and instructors of classes. The *Course Schedule* and *General Information* are published on the Office of the Registrar's website (https://registrar.utexas.edu).

Each semester the academic adviser for the college provides registration guidance that is specific to the College of Pharmacy.

## **Registration as a Student Pharmacist-Intern**

Upon matriculation to the first professional year, each student must register as an intern-trainee with the Texas State Board of Pharmacy. This is accomplished through completion of the Application for Student-Intern Registration. Each student must be registered as a student-intern in order to complete the academic requirements for the degree.

Additional information regarding intern registration and pharmacist licensure is given in the section Legal Requirements for Professional Practice (p. 761). Requirements and regulations are subject to change by the Texas State Board of Pharmacy. Every attempt is made to inform students of changes as they occur.

## **Professional Liability Insurance**

Professional liability insurance is required of all students each year of the professional pharmacy curriculum. Coverage in the amount of two million dollars for each claim and six million dollars in the aggregate per year is provided through the insurance policy. The annual premium is less than \$20.00 but is subject to change, and is payable by the student. The policy covers the period September 1 through August 31 and must be secured each year of the program through the University of Texas System.

## **Medical Clearance Requirements**

In addition to the University's immunization requirements, students must meet additional immunization requirements for students in healthcare programs as articulated in Title 25 of the Texas Administrative Code, Rule 97.64, and as mandated by the practice sites in which students participate in practicum experiences.

Immunization requirements are subject to change. Every effort is made to notify students promptly of any changes. A current list of vaccination requirements can be found on the College of Pharmacy's website (http://sites.utexas.edu/phr-experiential/student-experience/policies-requirements/mandatory-immunization-schedule).

Although not a College of Pharmacy requirement, students may be subject to other health clearance requirements mandated by health care facilities for practicum.

## **Student Health Insurance**

Students must procure health insurance to cover treatment for injuries or illness, and must provide proof of insurance each year of the curriculum. This is especially important for the experiential components of the curriculum, spanning all four professional years, when students have frequent contact with patients in a number of different health care environments.

The Student Health Insurance Plan, operated under the auspices of University Health Services, offers optional low-cost insurance for students who are not covered by other programs. Information about this plan is available through University Health Services at http:// healthyhorns.utexas.edu/.

# Academic Policies and Procedures

## **Academic Standards**

University regulations on scholastic probation and dismissal are given in the *General Information Catalog* (http://catalog.utexas.edu/generalinformation/academic-policies-and-procedures/scholastic-probationand-dismissal). In addition, the following academic standards are in effect in the College of Pharmacy.

### **Academic Progress**

- 1. The student must repeat a required pharmacy course in which he or she earns a grade of *F*. The student who earns a grade of *D*+, *D*, or *D*in a required pharmacy course becomes subject to the policies on academic probation and dismissal described below.
- 2. The student must earn a grade of at least *C* in each elective pharmacy course. If the student fails to earn a grade of at least *C* in an elective pharmacy course, he or she may repeat the course or may take another elective course in its place, but only courses in which the student has earned a grade of at least *C* may be counted toward the professional elective requirement.
- 3. The student must earn an average of at least two grade points (2.00) a semester hour on all courses undertaken at the University, whether passed or failed in order to graduate. The student must also earn an average of at least two grade points (2.00) a semester hour on all required pharmacy courses undertaken, whether passed or failed.
- 4. The student may not repeat for credit a course in which he or she has earned a grade of *C* or better, except under circumstances approved by the dean.
- Pharmacy elective courses and laboratory problems courses can be take on the letter-grade or pass/fail basis, unless otherwise stated in the *Course Schedule* (http://registrar.utexas.edu/schedules). However, the student must complete the Professional Electives Course Requirement (p. 768) with approved elective courses taken for the letter grade basis.

### **Academic Probation and Dismissal**

A student is placed on academic probation in the College of Pharmacy if he or she receives a grade of *D+*, *D*, *D-*, or *F* in any required pharmacy course. If the grade received is an *F*, the student must repeat the course and may not progress to courses for which it is a prerequisite until he or she has earned a grade of at least *C*- in the failed course. If the initial grade received is a *D*+, *D*, or *D*-, the student may progress to courses for which the course is a prerequisite. The student may choose to repeat a course in which he or she received a *D*+, *D*, or *D*-, if the course does not conflict with other courses the student would normally take in the same semester; however, this choice affects the student's release from academic probation as described in the following section.

If the student receives more than two incompletes in required pharmacy courses, regardless of the grades ultimately awarded, he or she is subject to review by the Academic Performance Committee. The committee may choose to place the student on academic probation.

A student is subject to dismissal from the college if he or she receives more than one D+, D, D-, or F in required pharmacy courses in one semester. The student is also subject to dismissal if he or she receives an additional D+, D, D-, or F while on academic probation or conditional academic probation.

Students on academic probation are expected to focus on academic improvement and thus are not allowed to hold student offices (elected, appointed, or committee chairmanship) or receive college stipends for travel to professional meetings or other college-sponsored events.

### **Release from Academic Probation**

After receiving a grade of F, the student must repeat the course and earn a grade of at least C-. If the failed course is a prerequisite for another course, the student must repeat the course and earn a grade of at least C-before taking the course for which the failed course is a prerequisite. In the semester or summer session in which he or she repeats the course, the student must complete a full academic load, including at least five hours in required pharmacy courses and/or other courses recommended by the academic adviser. A full academic load is defined for this purpose as 12 hours in a long-session semester and six hours in the summer. The new grade is averaged with the grade of F when the student's pharmacy grade point average is calculated. If the new grade is C- or better, the student is released from academic probation if and only if he or she has earned no further grades of D+, D, D-, or F while on academic probation or conditional academic probation. If the student does not earn a grade of at least C- upon repeating the course, he or she is subject to academic dismissal.

After receiving a grade of D+, D, or D-, the student chooses whether or not to repeat the course, if the course does not conflict with other courses the student would normally take in the same semester. He or she may progress to courses for which the course in question is a prerequisite. If the student chooses to repeat the course, he or she must earn a grade of at least C-. If the new grade is a C- or better, the student is released from academic probation only if he or she has earned no further grades of D+, D, D-, or F while on academic probation or conditional academic probation. If the student does not earn a grade of at least C- upon repeating the course, he or she is subject to academic dismissal. The new grade is averaged with the grade of D+, D, or D- when the student's pharmacy grade point average is calculated.

If the student chooses not to repeat the course, he or she remains on academic probation (or conditional academic probation, described below) through completion of the P4 advanced pharmacy practice experiential courses in the final semester. To take the P4 experiential courses, the student must have a grade point average of at least 2.00 in required pharmacy courses. If the student earns the symbol *CR* in each P4 advanced pharmacy practice course, he or she is released from probation and graduates in good academic standing with the college.

### **Conditional Academic Probation**

If a student on academic probation receives no grade lower than *C*- in required pharmacy courses during the following semester or summer session in which he or she takes a full academic load, the student may be placed on conditional academic probation. This status allows the student to hold student office (elected, appointed or committee chairmanship) and to receive college stipends for travel to professional meetings or other college-sponsored events. The student remains on conditional academic probation until graduation and is subject to dismissal if he or she receives a second grade of *D*+, *D*, *D*-, or *F*.

### Academic Progression in the Pharm.D. Program

If the student's academic progression results in a two-year delay of progression at any time, he or she is subject to review by the Academic Performance Committee. The committee may choose to allow the student to continue in the program, place the student on conditional probation, or dismiss the student from the program.

## Comprehensive Milestone Exams and Academic Progression

During the third professional year, all students are required to complete a comprehensive P3 Milestone Exam. Students who successfully pass the exam will progress into the fourth, and final, professional year. Students who do not successfully pass the exam will be referred to the Academic Performance Committee for progression decisions and targeted remediation.

At the end of the fourth professional year, all students are required to complete a comprehensive P4 Milestone Exam. Students who successfully pass the exam will progress towards graduation provided all other degree requirements have been met. Students who do not successfully pass the exam will be referred to the Academic Performance Committee for progression decisions and targeted remediation.

## **Calculation of the Grade Point Average**

- The student's University grade point average includes all courses taken at the University for which a grade or symbol other than Q, W, X, or CR is recorded. If the student has repeated a course, including those courses for which he or she earned a grade of D+, D, D-, or F, all grades earned are included in the University grade point average.
- 2. The student's College of Pharmacy grade point average includes all required professional courses (excluding ALL elective courses) taken at the University for which a grade or symbol other than *Q*, *W*, *X*, or *CR* is recorded. When a student repeats a required pharmacy course, the second grade in the repeated course is averaged with the previous grade when the student's College of Pharmacy grade point average is calculated.

### The Academic Performance Committee

The College of Pharmacy Academic Performance Committee monitors the academic progress of students in the professional program. The committee makes recommendations to the dean regarding students' academic progress and academic probation and dismissal. The committee also makes recommendations to assist students who may be in academic difficulty. Any student in academic difficulty may be asked to appear before the committee for guidance. The committee hears all student appeals regarding academic progress and academic probation and dismissal. The committee aids the Admissions Committee in the evaluation of students who wish to return to the college after having been dismissed.

### **Course Load and Sequence of Work**

- 1. To progress to the final-year experiential courses, the student must have successfully completed all basic education requirements and all required and elective pharmacy courses except those in the internship year.
- 2. Because final-year experiential courses are offered on the pass/fail basis only, students must have attained both the University and the College of Pharmacy grade point average of at least 2.00 required for graduation before they begin the P4 advanced pharmacy practice experiential year.
- 3. If a conflict arises between University requirements and a student's employment, the student must resolve the conflict in favor of the University requirements.
- 4. A student who is not on academic probation must take at least 12 semester hours during any long-session semester, at least six hours of which must be for a letter grade (not pass/fail).
- 5. A student on academic probation must take at least 12 semester hours during any long-session semester or at least six semester hours during the summer session in order to clear academic probation.
- 6. Students may not take courses for degree credit at another institution without prior approval from the dean of the College of Pharmacy.
- 7. All students seeking to reenter the College of Pharmacy after having been placed on academic dismissal must make formal application through the Admissions Committee. The application is processed through the Admissions Committee with recommendations from the Academic Performance Committee and the approval of the dean.

## **Standards of Ethical Conduct**

Pharmacy practitioners enjoy a special trust and authority based on the profession's commitment to a code of ethical behavior in its management of client affairs. The inculcation of a sense of responsible professional behavior is a critical component of professional education, and high standards of ethical conduct are expected of pharmacy students.

Toward that end, the faculty and students of the College of Pharmacy have pledged their support to the Policy Statement on Ethical Conduct and Scholastic Integrity and the Code of Ethics that implements this Policy Statement. Upon entering the College of Pharmacy, and each academic year thereafter, students are asked to recite and sign the following pledge:

"As a student of The University of Texas College of Pharmacy, I have reviewed and hereby pledge my full support to the Honor Code. I pledge to be honest myself, and in order that the spirit and integrity of the Honor Code may endure, I pledge that I will make known to the appropriate authorities cases of dishonesty which I observe in the College of Pharmacy."

In addition, the following oath, which students will be asked to sign, is included at the end of all class examinations: "I have neither participated in nor witnessed any acts of academic dishonesty pertaining to this assignment." At the discretion of the instructor, the oath may also be included for other assignments such as quizzes, written reports, or papers.

Students are also required to adhere to the University's Student Honor Code which states "As a student at The University of Texas at Austin, I shall abide by the core values of the University and uphold academic integrity." The entire text of the Student Honor Code and the University's Code of Conduct can be found at http://www.utexas.edu/about/missionand-values.

The entire text of the Policy Statement on Ethical Conduct and Scholastic Integrity and the Honor Code are available at http://www.utexas.edu/pharmacy/students/handbook98/3code.html.

Students who violate University rules on scholastic dishonesty are subject to disciplinary penalties, including failure of the course involved and dismissal from the college and/or the University. Since dishonesty harms the individual, fellow students, and the integrity of the University and the College of Pharmacy, policies on scholastic dishonesty are strictly enforced.

## Attendance in Class and Laboratories

Students in the College of Pharmacy are expected to attend all scheduled class and laboratory sessions in courses for which they are registered. If attendance is a course requirement that can impact the student's grade, the criteria for assessing attendance and consequences for nonattendance must be specified in the syllabus.

## Honors

University-wide honors are described in *General Information* (http:// catalog.utexas.edu/general-information/academic-policies-andprocedures/honors). In addition, the College of Pharmacy encourages academic excellence through Rho Chi, the national pharmaceutical honor society, described in Student Organizations (p. 759), and through the Pharmacy Honors Program.

### **University Honors**

The designation University Honors, awarded at the end of each longsession semester, gives official recognition and commendation to students whose grades for the semester indicate distinguished academic accomplishment. Both the quality and the quantity of work done are considered. Criteria for University Honors are given in *General Information* (http://catalog.utexas.edu/general-information/academicpolicies-and-procedures/honors/#universityhonorstext).

### **Graduation with University Honors**

Students who, upon graduation, have demonstrated outstanding academic achievement are eligible to graduate with University Honors. Criteria for graduation with University Honors are given in *General Information* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/honors/#graduationwithuniversityhonorstext).

## Pharmacy Honors Program

### **Criteria for Admission**

Students who plan to seek special honors in pharmacy should apply to the chair of the Honors Program Committee after they have completed the fall semester of the first professional year; they must apply before they begin the second professional year. Students interested in the Pharmacy Honors Program are strongly encouraged to enroll in PHM 181R Research Opportunities in the Pharmaceutical Sciences in the spring semester of their first professional year. The criteria for admission to the program are (1) admission to the professional curriculum; (2) a grade point average of at least 3.00 in all required professional coursework completed at the time of application to the program; and (3) approval of the Honors Program Committee.

### **Requirements for Completion**

Requirements for the completion of the honors program are (1) a grade point average of at least 3.00 in all required professional courses; (2) a grade point average of at least 3.00 in all professional courses, including required professional elective coursework; (3) completion of Pharmacy PharmD 187R at least twice; (4) completion of at least one honors elective; (5) completion of Pharmacy PharmD 288H and 489H; and (6) completion of the regular curriculum for the degree.

The statement "Research Honors in Pharmacy" appears on the transcript of each graduate certified to have completed the honors program.

### **College of Pharmacy Recognition Awards**

The College of Pharmacy Award for Academic Achievement recognizes a graduate who has demonstrated an outstanding grade point average, professional attitude, and excellent communication skills.

The College of Pharmacy Award for Outstanding Research recognizes a graduate who has demonstrated outstanding ability in areas of pharmacy research.

The College of Pharmacy Award for Excellence in Patient Care recognizes a graduate who has demonstrated excellence in patient care while pursuing the PharmD degree.

The College of Pharmacy Award for Dedicated Service recognizes a graduate who has shown a commitment to service above and beyond the norm.

The College of Pharmacy Award for Exemplary Leadership recognizes a graduate who has excelled in leadership while pursuing the PharmD degree.

The College of Pharmacy Alumni Association Mortar and Pestle Award for Leadership, Service, and Patient Care recognizes an exceptional graduate who has demonstrated outstanding leadership, service, and patient care in the college, the University, and the community while pursuing the PharmD degree. The award is a hand-carved mortar and pestle.

The College of Pharmacy Class Officers are elected by their classmates and serve as permanent officers of their class.

Students' scholarly accomplishments are also recognized through election to Rho Chi, the national pharmaceutical honor society, and through admission to the Pharmacy Honors Program. Students' leadership accomplishments are recognized through election to Phi Lambda Sigma, the national pharmacy leadership society.

## Graduation

All students must fulfill the general requirements (p. 20) for graduation. In addition, students seeking the Doctor of Pharmacy (Pharm.D.) must complete in residence the courses prescribed for the third and fourth professional years.

All University students must have a grade point average of at least 2.00 to graduate. In the College of Pharmacy, students must also have a grade point average of at least 2.00 in required professional courses to graduate.

A candidate must complete the prescribed curriculum and must meet all other requirements of the College of Pharmacy.

PharmD professional students are not required to submit a Graduation Application Form to graduate.

## **Degrees and Programs**

The University offers the Pharm.D. as the sole entry-level pharmacy practice degree. As described in the mission (p. 757), this program emphasizes an integrated and problem-based approach to disease

management as the core of the didactic, laboratory, and experiential program of study.

The capstone of the Pharm.D. program is a series of seven six-week rotations known as the advanced pharmacy practice experiences (APPE (http://sites.utexas.edu/phr-experiential/student-experience/ advanced-pharmacy-practice-experience-appe)). Each APPE course requires a minimum of 45 on-site, practitioner-faculty-supervised hours of internship experience a week for six weeks.

The college expects but cannot guarantee that experiential regions will include Austin/Temple/Waco, Dallas/Fort Worth (the University of Texas Southwestern Medical Center and other area health care facilities), Galveston/Houston (the University of Texas Medical Branch at Galveston, the University of Texas M. D. Anderson Cancer Center, and other area health care facilities), the Rio Grande Valley (the University of Texas - Rio Grande Valley and health care facilities primarily in Harlingen and McAllen), and San Antonio (the University of Texas Health Science Center San Antonio and other area health care facilities). Students assigned to San Antonio spend two years in this region, while students assigned to other regions spend only the final year in the APPE region.

College of Pharmacy students who complete their experiential courses at the University of Texas Health Science Center at San Antonio are considered part of a joint Pharm.D. degree program and receive a degree awarded jointly by the two institutions. The joint nature of this program is reflected on the student's diploma.

In completing the Doctor of Pharmacy degree, students also fulfill the internship requirements of the Texas State Board of Pharmacy. The final year of APPE courses and several other practice-based experiential courses, beginning in the first professional year, make up the experiential program. The professional experience courses are currently approved by the Texas State Board of Pharmacy to meet its standards for completion of the professional internship licensure requirement. The board reassesses all programs annually.

### The Minor

While a minor is not required as part of the Pharm.D. degree program, the student may choose to complete additional coursework in a field outside of the College of Pharmacy. A course may not be counted both toward the minor and toward the 219 hours of work required for the Pharm.D. degree.

The transcript-recognized undergraduate academic minor must be completed in conjunction with an undergraduate degree at The University of Texas at Austin; students pursuing an integrated undergraduate/graduate program must complete the requirements for the minor within one year after completing the undergraduate requirements of their program. For more information regarding the requirements for achieving a minor, including a comprehensive list of minors, please visit the Minors and Certificate Programs (p. 13) section of the *Undergraduate Catalog*.

## Applicability of Certain Courses Physical Activity Courses

Physical activity (PED) courses are offered by the Department of Kinesiology and Health Education. They may not be counted toward a degree in the College of Pharmacy. However, they are counted among courses for which the student is enrolled, and the grades are included in the University grade point average.

### **ROTC Courses**

Courses in air force science, military science, and naval science may be substituted for a total of nine semester hours of non-pharmacy electives by students who complete the 16 to 20 semester hours of required air force science, military science, or naval science coursework and accept a commission in one of the services. These courses may not be counted toward the professional elective requirement.

### **Correspondence and Extension Courses**

Credit that a University student in residence earns simultaneously by correspondence or extension from the University or elsewhere or in residence at another school will not be counted toward a degree unless it is specifically approved in advance by the dean. No more than 30 percent of the semester hours required for any degree may be completed by correspondence, and no pharmacy courses taken by correspondence or extension may be counted toward a pharmacy degree.

## **Prescribed Work**

Students who enter the Doctor of Pharmacy degree program must complete a minimum of 219 semester hours of coursework in the following areas: the core curriculum, additional basic education requirements, professional electives, and pre-professional and professional coursework.

## **Core Curriculum**

Each student must complete the University's Core Curriculum (p. 23). Because of the intensity and structure of the professional pharmacy curriculum, and because admission to the professional curriculum is highly competitive, the College of Pharmacy strongly recommends that students complete all of the core courses before they enter the college

The following core requirements are usually met by the pre-professional and professional coursework described below: English composition with one writing flag, mathematics, science and technology (parts I and II), and humanities. Students must complete additional coursework to meet the core requirements listed below; the courses in each core area are listed in Core Curriculum (p. 23).

Requirements	Hours
Additional Coursework	
First-year signature course	3
American and Texas government	6
American history	6
Social and behavioral sciences	3
Visual and performing arts	3
Total Hours	21

Transfer students who complete the core curriculum at another public Texas institution of higher education with core completion specified on their transcript and who are then admitted to the Pharm.D. program are considered "core complete" by the University. Core curriculum requirements are waived for students admitted to the Pharm.D. program who have previously earned a bachelor's degree.

## **Additional Basic Education Requirements**

All students must also earn the following skills and experiences flags: writing, quantitative reasoning, cultural diversity in the United States, ethics, global cultures, and independent inquiry. See skills and experiences for more information; courses that carry these flags are identified in the *Course Schedule*. All skills and experience flags are

fulfilled by courses within the professional pharmacy sequence, except for global cultures.

Flag requirements are waived for students admitted to the professional curriculum who have already earned a bachelor's degree.

All students must complete the foreign language (p. 24) requirement before they enter the professional curriculum (unless they hold a prior bachelor's degree).

## Professional Electives Course Requirement

The student must complete at least two professional elective courses, for a total of at least seven semester hours, on the letter-grade basis. The student must take the courses used to fulfill the professional electives requirement after admission to the professional curriculum.

## Preprofessional and Professional Coursework

The following courses are required. The course sequence given here shows the usual order in which courses are taken to fulfill prerequisite requirements and illustrates the feasibility of completing requirements for the degree within six calendar years. Students who depart significantly from this sequence may need more time to complete their coursework, because most courses are taught only once a year and because in a given semester the scheduled meeting time of a preprofessional or professional course may conflict with the times of core courses or professional electives.

First	Preprofessional Yea	r
1 11 0 1	reprotessional rea	

First Preprofessional \	/ear	
First Term	Hours Second Term	Hours
BIO 311C	3 U.S. history	3
CH 301	3 Social and behaviora sciences core course	
M 408K or 408N	4 BIO 311D	3
RHE 306	3 SDS 301	3
UGS 302 or 303 <sup>1</sup>	3 CH 204	2
	CH 302	3
	16	17
Second Preprofession	al Year	
First Term	Hours Second Term	Hours
CH 320M	3 BIO 226L	2
PHY 302K	3 U.S. and Texas government	3
PHY 102M	1 U.S. history	3
U.S. and Texas government	3 Visual and performing arts core course	3
BIO 325	3 CH 220C	2
E 316L, 316M, 316N, or 316P	3 CH 320N	3
	BIO 326R	3
	16	19
First Professional Year	r	
First Term	Hours Second Term	Hours
PHM 381M	3 PHM 287DB	1
PHM 387M	3 PHM 281L	2
PHM 287DA	1 PHM 181P	1
PHM 187P	1 PHM 281N	2
PHM 180K	1 PHM 388M	3
PHM 180P	1 PHM 188P	1
PHM 287N	2 PHM 480D	4
PHM 480C	4 PHM 181T	1
PHM 181S	1 PHM 191V	1

PHM 191U	1		
	18	16	
Second Profession	nal Year		
First Term	Hours Second Term	Hours Summer Term	Hours
PHM 282E	2 PHM 190P	1 PHM 386H	3
PHM 195Q	1 PHM 390N	3	
PHM 195P	1 PHM 182F	1	
PHM 384L	3 PHM 182P	1	
PHM 284M	2 PHM 184P	1	
PHM 392P	3 PHM 184N	1	
PHM 181	1 PHM 186Q	1	
PHM 182	1 PHM 289P	2	
PHM 483	4 PHM 184	1	
PHM 182S	1 PHM 185	1	
PHM 192U	1 PHM 486	4	
	PHM 182T	1	
	PHM 192V	1	
	20	19	3
Third Professional	Year		
First Term	Hours Second Term	Hours	
PHM 183F	1 PHM 284E	2	
PHM 183G	1 PHM 394F	3	
PHM 185P	1 PHM 295R	2	
PHM 387H	3 PHM 186P	1	
PHM 187	1 PHM 291	2	
PHM 288	2 PHM 292	2	
PHM 189	1 PHM 193	1	
PHM 190	1 PHM 183T	1	
PHM 183S	1 PHM 193V	1	
PHM 193U	1 Professional	3	
	Elective(s)		
Professional	4		
elective(s)			
	17	18	
Fourth Professiona	al Year		
First Term	Hours Second Term	Hours Summer Term	Hours
PHM 693E	6 PHM 693S	6 PHM 693C	6
PHM 693N	6 PHM 694C	6	
PHM 693P	6 PHM 694E	6	
	Note: The order		
	in which students		
	take the fourth-year		
	internships is at the discretion of the		
	College of Pharmacy.		

Total credit hours: 221

<sup>1</sup> Students should consider enrolling in a First-Year Signature Course that also satisfies the global cultures flag requirement.

## Courses

The faculty has approval to offer the following courses in the academic years 2018–2019 and 2019–2020; however, not all courses are taught each semester or summer session. Students should consult the *Course Schedule* (http://registrar.utexas.edu/schedules) to determine which courses and topics will be offered during a particular semester or summer session. The *Course Schedule* may also reflect changes made to the course inventory after the publication of this catalog.

### Pharmacy PharmD: PHM

### **University Courses**

#### PHM 310K. Drugs in Our Society.

Survey of drug development, distribution, and safety, including therapeutic categories of drugs, their actions and abuse potential, and the sociological aspects of drug use. Three lecture hours a week for one semester. Only one of the following may be counted: Pharmacy 310K, 350K, Pharmacy PharmD 310K, 350K. Not open to students in the professional pharmacy curriculum and may not be counted toward the professional elective requirement in pharmacy.

## PHM 311K. Take your Medicine: Developing New Drug Products.

Restricted to non-pharmacy majors. Explores the process, challenges, and issues in developing pharmaceutical products. An overview of drug development, approval, and consumer issues will be presented and discussed in the context of research practices, consumers, science, marketing, public welfare, and innovative practices. Three lecture hours a week for one semester. Offered on the letter-grade basis only.

#### PHM 338. Introduction to Pharmacology.

Restricted to non-pharmacy majors. Survey of basic concepts and principles in pharmacology. Three lecture hours a week for one semester. Pharmacy 338 and Pharmacy PharmD 338 may not both be counted. Prerequisite: Credit or registration for Biology 365S, 446L, Biomedical Engineering 365R, 365S, or Kinesiology 324K.

#### PHM 350K. Drugs in Our Society.

Survey of drug development, distribution, and safety, including therapeutic categories of drugs, their actions and abuse potential, and the sociological aspects of drug use. Essay papers required. Three lecture hours a week for one semester. Only one of the following may be counted: Pharmacy 310K, 350K, Pharmacy PharmD 310K, 350K. Not open to students in the professional pharmacy curriculum and may not be counted toward the professional elective requirement in pharmacy. Prerequisite: Upper-division standing.

## PHM 160J, 260J, 360J. Basic Study in Pharmaceutical Research for Nonmajors.

Original investigation in any area of the pharmaceutical sciences. For each semester hour of credit earned, three laboratory hours a week for one semester. May be repeated for credit. Prerequisite: Consent of instructor and the dean.

#### **Professional Courses**

## PHM 480C. Human Normal Physiology/Pathophysiology and Basics in Pharmacology I.

Integrated approach consisting of normal physiology (with limited functional anatomy), pathophysiology, and basic principles in pharmacology to address the etiology of disease states affecting the nervous, gastrointestinal, visual/olfactory, skin, muscular, and cardiovascular systems. Four lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Admission to the professional pharmacy curriculum.

#### PHM 480D. Human Normal Physiology/Pathophysiology II.

Integrated approach consisting of normal physiology (with limited functional anatomy), pathophysiology, and basic principles in pharmacology to address the etiology of disease states affecting the blood/immune system, renal, pulmonary, endocrine, and metabolic systems. Also includes multi-systemic diseases related to infectious disease and cancer. Four lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 480C.

#### PHM 280H. Landmark Studies in Cardiovascular Disease.

Evidence-based clinical studies in support of drug therapy recommendations in the treatment of cardiovascular diseases. Two lecture hours a week for one semester. Pharmacy 280H and Pharmacy PharmD 280H may not both be counted. Prerequisite: Secondprofessional-year standing in pharmacy.

#### PHM 180K. Medicinal Chemistry Principles.

Introduction to medicinal chemistry principles. Subjects include drug metabolism and the transition from organic to medicinal chemistry. One lecture hour a week for one semester. Pharmacy 143M and Pharmacy PharmD 180K may not both be counted. Offered on the letter-grade basis only. Prerequisite: Admission to the professional pharmacy curriculum, and credit or registration for Pharmacy PharmD 180P (or Pharmacy 143P).

## PHM 280L, 380L. Landmark Pharmacotherapy Studies in Primary Care.

Reviewing, evaluating, and applying the results of landmark studies in pharmacotherapy to primary care practice. An examination of disease states encountered in primary care including diabetes, hypertension, dyslipidemias, and psychological disorders. For 280L, six laboratory hours a week for one semester; for 380L, nine laboratory hours a week for one semester. Only one of the following may be counted: Pharmacy PharmD 280L, 380L, Pharmacy 280L, 380L. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 195Q (or Pharmacy 163C), 185P (or Pharmacy 185P), 685E (or Pharmacy 695F), and 385G (or Pharmacy 395G).

#### PHM 180P. Basic Pharmaceutical Sciences Laboratory.

Laboratory exercises to support the basic pharmaceutical sciences courses. One hour of pre-laboratory lecture and three laboratory hours a week for one semester. Pharmacy 143P and Pharmacy PharmD 180P may not both be counted. Offered on the letter-grade basis only. Prerequisite: Admission to the professional pharmacy curriculum, and credit or registration for Pharmacy PharmD 180K (or Pharmacy 143M).

## PHM 180R, 280R, 380R. Basic Study in Pharmaceutical Research.

Basic exploration in any area of the pharmaceutical sciences. For each semester hour of credit earned, three laboratory hours a week for one semester. No more than three semester hours may be counted toward the professional pharmacy elective requirement. May be repeated for credit. Prerequisite: Admission to the PharmD program and consent of instructor and the dean.

#### PHM 180T, 280T, 380T. Global Health.

Restricted to students in the College of Pharmacy. An exploration of health care issues outside the United States with an inside look at different cultures and healthcare systems to enhance global awareness and cultural competence in the practice of pharmacy. For every credit hour earned, one lecture hour per week for one semester. Offered on the letter-grade basis only.

## PHM 280W. Psychiatric Pharmacy Practice and Drug Treatment of Mental Disorders.

Advanced study in the pathophysiology of selected psychiatric disease states and the clinical presentation, phenomenology, diagnosis, and treatment of these disease states. Two lecture hours a week for one semester. Pharmacy 280W and Pharmacy PharmD 280W may not both be counted. Prerequisite: Credit or registration for Pharmacy PharmD 685F (or Pharmacy 695F), or consent of instructor.

## PHM 181. Pharmacotherapeutics of the Renal and Autonomic Systems.

An integrated approach to the etiology and treatment of disease states of the renal and autonomic systems. The equivalent of one lecture hour per week for one semester. Pharmacy PharmD 181 and 685D (or Pharmacy 665E) may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Pharmacy PharmD 480D, 182, 483, and 392P.

#### PHM 181C, 281C. Professional Development Convocation I.

Professional development issues and assessments for PharmD students in the first professional year. Includes students' professional and program-specific responsibilities, such as program evaluations, portfolios, and administrative requirements; practice opportunities in pharmacy; and expected areas and levels of professional growth as the student advances through the curriculum. For each semester hour of credit earned, one lecture hour a week for one semester. Only one of the following may be counted: Pharmacy 142H, Pharmacy PharmD 181C, 281C, 281S. Offered on the letter-grade basis only. Prerequisite: Admission to the professional pharmacy curriculum.

#### PHM 181D, 281D. Professional Development Convocation II.

Professional development issues and assessments for PharmD students in the first professional year. Student fulfillment of professional and program-specific responsibilities (program evaluations, portfolios, administrative requirements), practice opportunities in pharmacy, and addressing the expected areas and levels of professional growth as the student advances through the curriculum. For each semester hour of credit earned, one lecture hour a week for one semester. Only one of the following may be counted: Pharmacy 152H, Pharmacy PharmD 181D, 281D, 281T. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 181C, 281C, 281S (or Pharmacy 142H).

## PHM 381H. Interprofessional Health Care for HIV Patient Management.

Interprofessional teamwork, health literacy, treatment guidelines, patient safety, and medication reconciliation in the care of patients with the human immunodeficiency virus. Conducted at an HIV clinic in Texas. Students complete six hours of required Web-based instruction before beginning the clinical component. Six hours of online lecture and a minimum of fifty hours of fieldwork in one semester. Pharmacy 381H and Pharmacy PharmD 381H may not both be counted. Offered on the lettergrade basis only. Prerequisite: Completion of the second professional year in the College of Pharmacy.

#### PHM 381K. Pharmaceutical Marketing.

Concepts of marketing as they apply to the pharmaceutical industry, pharmaceutical products, and the health care environment. Three lecture hours a week for one semester. Pharmacy 320M and Pharmacy PharmD 381K may not both be counted. Prerequisite: Pharmacy PharmD 281L (or Pharmacy 244C) and 181P (or Pharmacy 144P).

#### PHM 281L. Personnel Management and Patient Behavior.

Concepts and principles of management, and social and behavioral aspects of pharmacy practice. Two lecture hours a week for one semester. Pharmacy 244C and Pharmacy PharmD 281L may not both be counted. Offered on the letter-grade basis only. Prerequisite: Admission to the professional pharmacy curriculum and credit or registration for Pharmacy PharmD 181P (or Pharmacy 144P).

#### PHM 381M. Pharmaceutical Biochemistry I.

Basic principles of intermediary metabolism, with emphasis on defects in pathways that result in disease and on identification of molecular targets for therapeutic control. Three lecture hours a week for one semester. Pharmacy 341C and Pharmacy PharmD 381M may not both be counted. Offered on the letter-grade basis only. Prerequisite: Admission to the professional pharmacy curriculum.

#### PHM 281N. Pharmaceutical Biochemistry II.

The biosynthesis and function of macromolecules (nucleic acids, lipids, proteins, and carbohydrates); sites of drug action, immunology, and applications of biotechnology and molecular biology to the pharmaceutical sciences. Two lecture hours a week for one semester. Pharmacy 251C and Pharmacy PharmD 281N may not both be counted. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 381M (or Pharmacy 341C).

## PHM 181P. Personnel Management and Patient Behavior Laboratory.

Explores issues in pharmacy practice. Includes case study discussions, group presentations, and small group work to enhance communication and teamwork skills. Three laboratory hours a week for one semester. Pharmacy 144P and Pharmacy PharmD 181P may not both be counted. Offered on the letter-grade basis only. Prerequisite: Admission to the professional pharmacy curriculum, and credit or registration for Pharmacy PharmD 281L (or Pharmacy 244C).

## PHM 181R. Research Opportunities in the Pharmaceutical Sciences.

An introduction to research in all divisions of the College of Pharmacy. Includes ethical issues in research, career paths in research, and subjects such as choosing a research mentor or project. One lecture hour and three laboratory hours a week for one semester. Pharmacy 151R and Pharmacy PharmD 181R may not both be counted. Offered on the lettergrade basis only. Prerequisite: Admission to the professional pharmacy curriculum.

#### PHM 181S, 281S. Foundations of Professional Development I.

Restricted to students in the College of Pharmacy. In-depth education and training to promote personal and professional development of students. Built on six interdependent pillars: Self-Awareness, Professionalism, Leadership, Career Development and Planning, Contemporary Issues in Practice, and Interprofessional Collaborative Practice (ICP). Employs a series of seminars and team-based workshops, and interprofessional learning experiences to inculcate students into the College of Pharmacy and profession of pharmacy. Focuses on selfawareness, professionalism, leadership development, career planning and decision-making, contemporary issues in pharmacy practice, and interprofessional collaboration. For each semester hour of credit earned, one lecture hour a week for one semester. Only one of the following may be counted: Pharmacy 142H, Pharmacy PharmD 181C, 281C, 181S, 281S. Offered on the letter-grade basis only. Prerequisite: Admission to the professional pharmacy curriculum.

## PHM 181T, 281T. Foundations of Professional Development II.

In-depth education and training to promote personal and professional development of students. Built on six interdependent pillars: Self-Awareness, Professionalism, Leadership, Career Development and Planning, Contemporary Issues in Practice, and Interprofessional Collaborative Practice (ICP). Employs a series of seminars, team-based workshops, and interprofessional learning experiences to inculcate students into the College of Pharmacy and profession of pharmacy. Focuses on self-awareness, professionalism, leadership development, career planning and decision-making, contemporary issues in pharmacy practice, and interprofessional collaboration. For each semester hour of credit earned, one lecture hour a week for one semester. Only one of the following may be counted: Pharmacy 152H, Pharmacy PharmD 181D, 281D, 181T, 281T. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 181C, or 281C, or 181S, or 281S, (or Pharmacy 142H).

#### PHM 182. Pharmacotherapeutics of the Respiratory System.

An integrated approach to the etiology and treatment of disease states of the respiratory system. The equivalent of one lecture hour per week for one semester. Pharmacy PharmD 182 and 685D (or Pharmacy 665E) may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Pharmacy PharmD 480D, 182, 483, and 392P.

#### PHM 182C, 282C. Professional Development Convocation III.

Professional development issues and assessments for PharmD students in the second professional year. Student fulfillment of professional and program-specific responsibilities (program evaluations, portfolios, administrative requirements), practice opportunities in pharmacy, and addressing the expected areas and levels of professional growth as the student advances through the curriculum. For each semester hour of credit earned, one lecture hour a week for one semester. Only one of the following may be counted: Pharmacy 161H, Pharmacy PharmD 182C, 282C, 282S. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 181D, or 281D, or 281T, (or Pharmacy 152H).

#### PHM 182D, 282D. Professional Development Convocation IV.

Professional development issues and assessments for PharmD students in the second professional year. Student fulfillment of professional and program-specific responsibilities (program evaluations, portfolios, administrative requirements), practice opportunities in pharmacy, and addressing the expected areas and levels of professional growth as the student advances through the curriculum. For each semester hour of credit earned, one lecture hour a week for one semester. Only one of the following may be counted: Pharmacy 172H, Pharmacy PharmD 182D, 282D, 282T. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 182C, or 282C, or 282S, (or Pharmacy 161H).

## PHM 282E. Nonprescription Pharmacotherapeutics and Self-Care I.

Study of nonprescription products and complementary and alternative medicine as it relates to the patient's ability to care for themselves with emphasis on the pharmacist's consultant role in product selection and nonpharmacologic recommendations. Two lecture hours a week for one semester. Pharmacy 262D and Pharmacy PharmD 282E may not both be counted. Offered on the letter-grade basis only. Prerequisite: Admission to the professional pharmacy curriculum.

## PHM 182F. Nonprescription Pharmacotherapeutics and Self-Care II.

A continuation of Pharmacy PharmD 282E. The study of nonprescription products and complementary and alternative medicine as it relates to the patient's ability to care for themselves with emphasis on the pharmacist's consultant role in product selection and non-pharmacologic recommendations. One lecture hour a week for one semester. Pharmacy 172E and Pharmacy PharmD 182F may not both be counted. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 282E (or Pharmacy 262D), 392P (or Pharmacy 392S), and credit or registration for Pharmacy PharmD 182P (or Pharmacy 172P).

#### PHM 282G. Pharmacy Business Plan Development.

The fundamentals of writing a pharmacy business plan, including the mission statement, objectives, description of products and services, legal structure, location analysis, layout and design, pro forma financial statements, staffing, market analysis and strategies, and promotion and advertising plans, culminating in submission of the plan for national

competition. Two lecture hours a week for one semester. Pharmacy 282D and Pharmacy PharmD 282G may not both be counted. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 384K (or Pharmacy 326C) and completion of the second professional year in pharmacy, or consent of instructor.

## PHM 382K. Experimental Design and Research Methods in Health Care.

Concepts and procedures involved in designing and completing a research project. Three lecture hours a week for one semester. Pharmacy 322H and Pharmacy PharmD 382K may not both be counted. Prerequisite: Admission to the Pharmacy Honors Program or consent of instructor.

#### PHM 382L. Clinical Toxicology.

A course in toxicology that focuses on common poisons and their management; designed for pharmacy students planning to enter general practice. Three lecture hours a week for one semester. Pharmacy 362L and Pharmacy PharmD 382L may not both be counted. Prerequisite: Admission to the professional pharmacy curriculum.

## PHM 182P. Nonprescription Pharmacotherapeutics and Self Care II Laboratory.

Laboratory practice related to the pharmacist's consultant role in nonprescription product selection (including complementary and alternative medicine) and non-pharmacologic recommendations in self-care; includes fieldwork in a community pharmacy. One lecture hour and three laboratory or fieldwork hours a week for one semester. Pharmacy 172P and Pharmacy PharmD 182P may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Pharmacy PharmD 182F (or Pharmacy 172E), and current intern registration with the Texas State Board of Pharmacy.

## PHM 182R, 282R, 382R. Basic Studies in the Pharmaceutical Sciences.

Basic exploration in any area of the pharmaceutical and clinical sciences. For each semester hour of credit earned, one lecture hour a week for one semester. Pharmacy 161J, 261J, 361J and Pharmacy PharmD 182R, 282R, 382R may not both be counted unless the topics vary. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: Admission to the professional pharmacy curriculum; additional prerequisites vary with the topic.

## PHM 182S, 282S. Foundations of Professional Development III.

In-depth education and training to promote personal and professional development of students. Built on six interdependent pillars: Self-Awareness, Professionalism, Leadership, Career Development and Planning, Contemporary Issues in Practice, and Interprofessional Collaborative Practice (ICP). Employs a series of seminars, team-based workshops, and interprofessional learning experiences to inculcate students into the College of Pharmacy and profession of pharmacy. Focuses on self-awareness, professionalism, leadership development, career planning and decision-making, contemporary issues in pharmacy practice, and interprofessional collaboration. For each semester hour of credit earned, one lecture hour a week for one semester. Only one of the following may be counted: Pharmacy 161H, Pharmacy PharmD 182C, 282C, 181S, 282S. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 181D, or 281D, 181T or 281T (or Pharmacy 152H).

## PHM 182T, 282T. Foundations of Professional Development IV.

In-depth education and training to promote personal and professional development of students. Built on six interdependent pillars: Self-Awareness, Professionalism, Leadership, Career Development and Planning, Contemporary Issues in Practice, and Interprofessional Collaborative Practice (ICP). Employs a series of seminars, team-based workshops, and interprofessional learning experiences to inculcate students into the College of Pharmacy and profession of pharmacy. Focuses on self-awareness, professionalism, leadership development, career planning and decision-making, contemporary issues in pharmacy practice, and interprofessional collaboration. For each semester hour of credit earned, one lecture hour a week for one semester. Only one of the following may be counted: Pharmacy 172H, Pharmacy PharmD 182D, 282D, 182T, 282T. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 182C, or 282C, or 182S, or 282S (or Pharmacy 161H).

## PHM 483. Pharmacotherapeutics of the Cardiovascular System.

An integrated approach to the etiology and treatment of disease states of the cardiovascular system. The equivalent of four lecture hours a week for one semester. Pharmacy PharmD 483 and 685D (or Pharmacy 665E) may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Pharmacy PharmD 480D, 182, 483, and 392P.

#### PHM 183C, 283C. Professional Development Convocation V.

Professional development issues and assessments for PharmD students in the third professional year. Student fulfillment of professional and program-specific responsibilities (program evaluations, portfolios, administrative requirements), practice opportunities in pharmacy, and addressing the expected areas and levels of professional growth as the student advances through the curriculum. For each semester hour of credit earned, one lecture hour a week for one semester. Only one of the following may be counted: Pharmacy 182H, Pharmacy PharmD 183C, 283C, 283S. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 182D, or 282D, or 282T, (or Pharmacy 172H).

#### PHM 183D, 283D. Professional Development Convocation VI.

Professional development issues and assessments for PharmD students in the third professional year. Student fulfillment of professional and program-specific responsibilities (program evaluations, portfolios, administrative requirements), practice opportunities in pharmacy, and addressing the expected areas and levels of professional growth as the student advances through the curriculum. For each semester hour of credit earned, one lecture hour a week for one semester. Only one of the following may be counted: Pharmacy 192H, Pharmacy PharmD 182R (Topic: PROFESNL DEVEL CONVOCATION VI), 183D, 283D, 283T. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 183C, or 283C, or 283S, (or Pharmacy 182H).

## PHM 383E. Development of Interprofessional Education for Collaborative Practice.

A collaboration between students in pharmacy, nursing, social work, and medicine in the development of educational modules addressing interprofessional education in collaborative practice relating to error disclosure, service learning, healthcare quality improvement. Preprofessional introduction to interprofessional education competencies. Three lecture hours a week for one semester. Pharmacy 383E and Pharmacy PharmD 383E may not both be counted. Offered on the letter-grade basis only. Prerequisite: Completion of the second professional year in the College of Pharmacy.

#### PHM 183F. Basic Intravenous Admixtures.

Basic principles of injectable and other sterile dosage forms; methods of preparation and evaluation that meet current pharmacy practice standards. One lecture hour a week for one semester. Pharmacy 183F and Pharmacy PharmD 183F may not both be counted. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 388M (or Pharmacy 356C), 188P (or Pharmacy 156P), and credit or registration for 183G (or Pharmacy 183G).

#### PHM 183G. Basic Intravenous Admixtures Laboratory.

Basic laboratory principles in the preparation and evaluation of injectable and other sterile dosage forms. One lecture hour and three laboratory hours a week for one semester. Pharmacy 183G and Pharmacy PharmD 183G may not both be counted. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 388M (or Pharmacy 356C), 188P (or Pharmacy 156P) and credit or registration for 183F (or Pharmacy 183F).

## PHM 383K. New Concepts, Topics, and Issues in Pharmacy Practice.

Three lecture hours a week for one semester. Pharmacy 322P and Pharmacy PharmD 383K may not both be counted. Prerequisite: Credit or registration for Pharmacy PharmD 384L (or Pharmacy 364D).

#### PHM 183P. Pharmacotherapeutics I Laboratory.

Problem-based laboratory course that integrates the pathophysiology, medicinal chemistry, pharmacology, and therapeutic aspects of various diseases in order to prepare students to make sound therapeutic decisions. Subjects introduced in Pharmacy PharmD 685D. Three laboratory hours a week for one semester. Pharmacy 165P and Pharmacy PharmD 183P may not both be counted. Prerequisite: Credit or registration for Pharmacy PharmD 685D (or Pharmacy 665E).

## PHM 183R, 283R, 383R. Advanced Study in Pharmaceutical Research.

For each semester hour of credit earned, three laboratory hours a week for one semester. No more than three semester hours may be counted toward the professional pharmacy elective requirement. May be repeated for credit. Prerequisite: Second-professional-year standing and consent of instructor and the dean.

## PHM 183S, 283S. Foundations of Professional Development V.

In-depth education and training to promote personal and professional development of students. Built on six interdependent pillars: Self-Awareness, Professionalism, Leadership, Career Development and Planning, Contemporary Issues in Practice, and Interprofessional Collaborative Practice (ICP). Employs a series of seminars, team-based workshops, and interprofessional learning experiences to inculcate students into the College of Pharmacy and profession of pharmacy. Focuses on self-awareness, professionalism, leadership development, career planning and decision-making, contemporary issues in pharmacy practice, and interprofessional collaboration. For each semester hour of credit earned, one lecture hour a week for one semester. Only one of the following may be counted: Pharmacy 182H, Pharmacy PharmD 183C, 283C, 183S, 283S. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 182D, 282D, or 182T, 282T, (or Pharmacy 172H).

## PHM 183T, 283T. Foundations of Professional Development VI.

In-depth education and training to promote personal and professional development of students. Built on six interdependent pillars: Self-Awareness, Professionalism, Leadership, Career Development and Planning, Contemporary Issues in Practice, and Interprofessional Collaborative Practice (ICP). Employs a series of seminars, team-based workshops, and interprofessional learning experiences to inculcate students into the College of Pharmacy and profession of pharmacy. Focuses on self-awareness, professionalism, leadership development, career planning and decision-making, contemporary issues in pharmacy practice, and interprofessional collaboration. For each semester hour of credit earned, one lecture hour a week for one semester. Only one of the following may be counted: Pharmacy 192H, Pharmacy PharmD 182R (Topic: PROFESNL DEVEL CONVOCATION VI), 183D, 283D, 183T, 283T. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 183C, or 283C, or 183S, or 283S, (or Pharmacy 182H).

#### PHM 283U. Multidisciplinary Pain Management.

Problem-based instruction to help health professions students acquire knowledge and skills in the care of patients with acute and chronic pain. Taught by faculty members in medicine, pharmacy, and nursing. Two lecture hours a week for one semester. Pharmacy 283U and Pharmacy PharmD 283U may not both be counted. Prerequisite: Consent of instructor.

## PHM 184. Pharmacotherapeutics of the Gastrointestinal System and Nutrition.

An integrated approach to the etiology and treatment of disease states of the gastrointestinal system. Also includes nutrition. The equivalent of one lecture hour per week for one semester. Pharmacy PharmD 184 and 385G (or Pharmacy 395G) may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Pharmacy PharmD 181, 184P, 185, 486, or consent of the dean.

## PHM 384D. Antimicrobics: Mechanism of Action and Clinical Use.

Mechanisms of antimicrobial activity and the development of bacterial resistance, and their relationship to clinical therapy. Three lecture hours a week for one semester. Pharmacy 384D and Pharmacy PharmD 384D may not both be counted. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 685E (or Pharmacy 675E) and 184P (or Pharmacy 175P).

#### PHM 284E. Pharmacy Law.

State and federal pharmacy laws. Two lecture hours a week for one semester. Pharmacy 284E and Pharmacy PharmD 284E may not both be counted. Offered on the letter-grade basis only. Prerequisite: Completion of the second professional year in the College of Pharmacy.

#### PHM 184H. Antimicrobics: Advanced Inquiry.

Designed to give students additional insight, beyond Pharmacy PharmD 384D, into the development of antimicrobial agents and the interactions of these agents with each other, the pathogen, and the patient. Students explore a self-selected topic for research and presentation. Conference course, with at least fifteen additional hours to be arranged. Pharmacy 184H and Pharmacy PharmD 184H may not both be counted. Offered on the letter-grade basis only. Prerequisite: Registration for Pharmacy PharmD 384D.

#### PHM 384K. Community Pharmacy Management.

Advanced concepts in community pharmacy management for the student who plans to become a pharmacy owner or manager. Covers operational, personnel, and financial management; marketing; layout and design; and the delivery of pharmaceutical care in a community pharmacy setting. Three lecture hours a week for one semester. Pharmacy 326C and Pharmacy PharmD 384K may not both be counted. Prerequisite: Pharmacy PharmD 281L (or Pharmacy 244C).

#### PHM 384L. Pharmacy and the Health Care System.

The health care system in the United States; principles of managed care; application of pricing policies; and an overview of pharmacy services. Three lecture hours a week for one semester. Pharmacy 364D and Pharmacy PharmD 384L may not both be counted. Offered on the lettergrade basis only. Prerequisite: Pharmacy PharmD 281L (or Pharmacy 244C) and 181P (or Pharmacy 144P).

#### PHM 284M. Pharmacy Professional Communications.

Professional communication skills in interacting with patients and other health care professionals. One lecture hour and three laboratory hours a week for one semester, with additional hours to be arranged. Pharmacy 266P and Pharmacy PharmD 284M may not both be counted. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 287D (or Pharmacy 242D).

#### PHM 184N. Interprofessional Ethics.

Explores ethical issues in pharmacy practice and health care, with a focus on the perspectives of professionals in the fields of nursing, law, social work, and medicine. One lecture hour a week for one semester. May include five additional discussion hours. Pharmacy 176E and Pharmacy PharmD 184N may not both be counted. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 281L (or Pharmacy 244C), 181P (or Pharmacy 144P), 384L (or Pharmacy 364D), and credit or registration for Pharmacy PharmD 282D (or Pharmacy 172H), 685E (Pharmacy 675E), and 184P (or Pharmacy 175P).

#### PHM 184P. Pharmacotherapeutics II Laboratory.

Problem-based laboratory that integrates the pathophysiology, medicinal chemistry, pharmacology, and therapeutic aspects of various diseases in order to prepare students to make sound therapeutic decisions. Three laboratory hours a week for one semester. Pharmacy 175P and Pharmacy PharmD 184P may not both be counted. Offered on the lettergrade basis only. Prerequisite: Credit for Pharmacy PharmD 685E (or Pharmacy 675E), or credit or registration for Pharmacy PharmD 181, 182, 483, 184, 185 and 486, or consent of the dean.

## PHM 284S. Quality and Patient Safety Interprofessional Education.

Concepts of patient safety and quality improvement. Current and past quality improvement projects are used to demonstrate the model of clinical safety and effectiveness. Reducing and preventing medical errors using the TeamSTEPPS approach; working in interprofessional teams on a quality improvement project. The equivalent of two lecture hours a week for one semester. Pharmacy 274S and Pharmacy PharmD 284S may not both be counted. Prerequisite: Completion of the second professional year in the College of Pharmacy.

#### PHM 185. Pharmacotherapeutics of Diabetes.

An integrated approach to the etiology and treatment of diabetes. The equivalent of one lecture hour per week for one semester. Pharmacy PharmD 185 and 385G (or Pharmacy 395G) may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Pharmacy PharmD 181, 184, 486, 184P, or consent of the dean.

#### PHM 685D. Pharmacotherapeutics I.

An integrated approach (pathophysiology, medicinal chemistry, pharmacology, and therapeutics) to the etiology and treatment of adrenergic-based diseases; cholinergic-based diseases; inflammatory diseases; hypertension; acute and chronic renal disease; and cardiovascular disease, including hyperlipidemia, circulatory problems, thromboembolic disease, myocardial ischemia, myocardial infarction, congestive heart failure, and arrhythmias. Six lecture hours a week for one semester. Pharmacy PharmD 181 and 685D (or Pharmacy 665E) may not both be counted. Pharmacy PharmD 182 and 685D (or Pharmacy 665E) may not both be counted. Pharmacy PharmD 483 and 685D (or Pharmacy 665E) may not both be counted. Pharmacy PharmD 483 and 685D (or Pharmacy 665E) and 190 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Pharmacy PharmD 282E (or Pharmacy 262D), 195Q (or Pharmacy 163C), 195P (or Pharmacy 163P) and 392P (or Pharmacy 392S).

#### PHM 685E. Pharmacotherapeutics II.

An integrated approach (pathophysiology, medicinal chemistry, pharmacology, and therapeutics) to the pathogenesis and treatment of bacterial, viral, and fungal infections; immunizations against bacterial and viral diseases; and allergies, asthma, and chronic obstructive pulmonary disease. Six lecture hours a week for one semester. Pharmacy PharmD 685E (or Pharmacy 675E) and 486 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 685D (or Pharmacy 665E) and credit or registration for Pharmacy PharmD 182P (or Pharmacy 175P).

#### PHM 685F. Pharmacotherapeutics III.

An integrated approach (pathophysiology, medicinal chemistry, pharmacology, and therapeutics) to the etiology and treatment of neurological and psychiatric disorders. Also includes therapeutics of pain management, anesthesia, drug addiction, and oncology. Six lecture hours a week for one semester. Pharmacy PharmD 685F (or Pharmacy 695F) and 288 may not both be counted. Pharmacy PharmD 685F (or Pharmacy 695F) or 291 may not both be counted. Pharmacy PharmD 685F (or Pharmacy 695F) and 292 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 685E (or Pharmacy 675E) and 182P (or Pharmacy 175P), and credit or registration for Pharmacy PharmD 185P (or Pharmacy 185P) and 385G (or Pharmacy 395G).

#### PHM 385G. Pharmacotherapeutics IV.

An integrated approach (pathophysiology, medicinal chemistry, pharmacology, and therapeutics) to the etiology and treatment of hormonal disorders and gastrointestinal disorders. Three lecture hours a week for one semester. Pharmacy PharmD 184 and 385G (or Pharmacy 395G) may not both be counted. Pharmacy PharmD 185 and 385G (or Pharmacy 395G) may not both be counted. Pharmacy PharmD 385G (or Pharmacy 395G) and 187 may not both be counted. Pharmacy PharmD 385G (or Pharmacy 395G) and 187 may not both be counted. Pharmacy PharmD 385G (or Pharmacy 395G) and 189 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 685E (or Pharmacy 675E) and 182P (or Pharmacy 172P) and credit or registration for Pharmacy PharmD 185P (or Pharmacy 185P) and 685F (or Pharmacy 695F).

#### PHM 385H. Pharmacotherapeutics of Special Populations.

Subjects include geriatrics, pediatrics, pharmacogenomics, transplant patients, and under-served populations. Three lecture hours a week for one semester. Pharmacy PharmD 385H (or Pharmacy 396D) and 193 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 390N (or Pharmacy 371S), 190P (or Pharmacy 171P), 182F (or Pharmacy 172E), 182P (or Pharmacy 172P), 185P (or Pharmacy 185P), 685F (or Pharmacy 695F), and 385G (or Pharmacy 395G).

#### PHM 185J. Independent Inquiry into Special Populations.

Companion course to required course, Pharmacy PharmD 385H. Students identify a category issue associated with one of the four major modules of the course (under-served populations, geriatrics, pharmacogenomics, or pediatrics), and work closely with a faculty mentor to complete a comprehensive paper and presentation to the class. For each semester or credit hour earned, the equivalent of one lecture hour a week for one semester. Pharmacy 196G and Pharmacy Pharm D 185J may not both be counted. Offered on the letter-grade basis only. Prerequisite: Registration for Pharmacy PharmD 385H.

#### PHM 385K. Applied Pharmacy Management.

Examination and application of principles of pharmacy management, with emphasis on human resource management. Subjects include interviewing and selection techniques, assessing job performance, improving the work environment, leadership skills, management skills, managing medication errors, and quality improvement of pharmacy services. Three lecture hours a week for one semester. Pharmacy 326M and Pharmacy PharmD 385K may not both be counted. Prerequisite: Pharmacy PharmD 281L (or Pharmacy 244C) and 181P (or Pharmacy 144P).

#### PHM 185P. Pharmacotherapeutics III Laboratory.

Problem-based laboratory that integrates the pathology, medicinal chemistry, pharmacology, and therapeutic aspects of various diseases in order to prepare students to make sound therapeutic decisions. Three laboratory hours a week for one semester. Pharmacy 185P and Pharmacy PharmD 185P may not both be counted. Offered on the lettergrade basis only. Prerequisite: Credit for Pharmacy PharmD 685E (or Pharmacy 675E), 185P (or Pharmacy 175P), 685F (or Pharmacy 695F), and 385G (or Pharmacy 395G); or credit or registration for Pharmacy PharmD 184P, 187, 288, 189, and 190; or consent of the dean.

#### PHM 486. Pharmacotherapeutics of Infectious Diseases.

An integrated approach to the etiology and treatment of infectious disease. The equivalent of four lecture hours a week for one semester. Pharmacy PharmD 685E (or Pharmacy 675E) and 486 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Pharmacy PharmD 181, 184, 184P, and 185; or consent of the dean.

#### PHM 386G. Spanish for the Pharmacy Professional.

Intermediate communication skills in Spanish. Three lecture hours a week for one semester. Pharmacy 386G and Pharmacy PharmD 386G may not both be counted. Prerequisite: Completion of the second professional year in the College of Pharmacy, and one year of college-level Spanish or consent of instructor.

#### PHM 386H. Institutional Clinical Skills.

Hands-on experience in an institutional practice care facility; examines pharmacy services, hospital pharmacy management, staff interaction, and the flow of information from pharmacy to bedside. Forty hours a week for two weeks. Pharmacy 377H and Pharmacy PharmD 386H may not both be counted. Offered on the credit/no credit basis only. Prerequisite: Current intern registration with the Texas State Board of Pharmacy; and Pharmacy PharmD 287D (or Pharmacy 242D), 281L (or Pharmacy 244C), 181P (or Pharmacy 144P), 195Q (or Pharmacy 163C), 195P (or Pharmacy 163P), 384L (or Pharmacy 364D), 284M (or Pharmacy 266P), 190P (or Pharmacy 171P), 390N (or Pharmacy 371S) , 282D (or Pharmacy 172H), 685E (or Pharmacy 675E), 182P (or Pharmacy 175P), 184N (or Pharmacy 176E) and 289P (or Pharmacy 277P, or 177G and 177P).

#### PHM 386K. Pharmacy Association Management.

An introduction to the principles involved in managing pharmacy associations. Students gain practical experience in a community pharmacy. Nine hours of fieldwork a week for one semester. Only one of the following may be counted: Pharmacy 329C, 389C, and Pharmacy PharmD 386K. Prerequisite: Pharmacy PharmD 281L (or Pharmacy 244C) and 181P (or Pharmacy 144P) and consent of instructor.

#### PHM 186P. Advanced Pharmacotherapeutics Laboratory.

Provides a safe, structured, and supportive laboratory setting for students to develop individual presentation skills necessary for professional practice. Presentations include journal clubs, development of data-driven drug therapy algorithms, and brief case presentations. One lecture hour and three laboratory hours a week for one semester. Pharmacy 194P and Pharmacy PharmD 186P may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit for Pharmacy PharmD 685F (or Pharmacy 695F), 385G (or Pharmacy 395G), and 185P (or Pharmacy 185P); or credit or registration for Pharmacy PharmD 185P, 291, 292, and 193; or consent of the dean.

## PHM 186Q. Experiential Pharmacy Practice and Patient Counseling.

Medication use and dispensing in a practice environment. Counseling skills and techniques for a better understanding of disease states and positive medication outcomes. Three laboratory hours a week for one semester. Pharmacy 176P and Pharmacy PharmD 186Q may not both be counted. Offered on the credit/no credit basis only. Prerequisite: Current intern registration with the Texas State Board of Pharmacy, and credit or registration for Pharmacy PharmD 685D (or Pharmacy 665E) and 284M (or Pharmacy 266P).

#### PHM 286R. Advanced Contemporary Compounding.

The art and science of compounding pharmaceutical preparations to develop an advanced understanding of formulation, stability, and quality standards of compounded pharmaceuticals. Focuses on pharmaceutical elegance; developing professional judgement based on limited data to assess the stability and efficacy of a compound before dispensing the preparation; the regulations governing compounding, including those outlined by the United States Pharmacopeial Convention, the Pharmacy Compounding Accreditation Board, and other scientific and professional organizations; mechanisms for evaluation and analysis of the quality of a compounded formulation; and marketing and promotion of compounding services. Two lecture hours a week for one semester. Pharmacy 256R and Pharmacy PharmD 286R may not both be counted. Offered on the letter-grade basis only. Prerequisite: Phamacy PharmD 388M (or Pharmacy 356C) and 188P (or Pharmacy 156P).

## PHM 186S. Advanced Contemporary Compounding Laboratory.

Advanced compounding methods with respect to pharmaceutical dosage forms and formulations, with emphasis placed on creating formulations that satisfy unique patient needs, and a discussion of equipment used by compounding pharmacists to formulate preparations that satisfy those needs. Pharmacy PharmD 186S builds upon compounding skills taught in Pharmacy PharmD 188P. Three laboratory hours a week for one semester. Pharmacy 156S and Pharmacy PharmD 186S may not both be counted. Offered on the letter-grade basis only. Prerequisite: Registration for Pharmacy PharmD 286R.

#### PHM 187. Pharmacotherapeutics of the Endocrine System.

An integrated approach to the etiology and treatment of disease states of the endocrine system. The equivalent of one lecture hour per week for one semester. Pharmacy PharmD 385G (or Pharmacy 395G) and 187 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Pharmacy PharmD 181 and 184P or consent of the dean.

#### PHM 287D. Introduction to Patient Care.

Basic aspects of caring for patients. Includes fieldwork in a local eldercare facility. One lecture hour and up to three laboratory hours a week for two semesters; and a minimum of twelve additional hours of fieldwork to be arranged over two semesters. Pharmacy 242D and Pharmacy PharmD 287D may not both be counted. Offered on the lettergrade basis only. Prerequisite: For Pharmacy PharmD 287DA, admission to the professional pharmacy curriculum; for 287DB, Pharmacy PharmD 287DA (or Pharmacy 242DA).

#### PHM 287H, 387H. Community Care Clinical Skills.

Clinical work in a community-based pharmacy practice setting. Includes medication therapy management training, participation in the development of patient care plans, the ability to develop and conduct a public health project, carry out patient exercises, and complete prescription management activities such as patient counseling. For Pharmacy PharmD 287H, 96 hours of fieldwork for one semester, for 387H, 120 hours of fieldwork for one semester. Pharmacy 287H and Pharmacy PharmD 287H, 387H may not both be counted. Offered on the credit/no credit basis only. Prerequisite: Current intern registration with the Texas State Board of Pharmacy; Pharmacy PharmD 195Q (or Pharmacy 163C), 195P (or Pharmacy 163P), 384L (or Pharmacy 364D), 284M (or Pharmacy 266P), 182F (or Pharmacy 172E), 182P (or Pharmacy 172P), 184N (or Pharmacy 176E), 289P (or 277P) and 392P (or Pharmacy 392S).

## PHM 187J, 287J, 387J. Advanced Problems in Pharmacy Education.

Laboratory course examining professional education issues and techniques for students exploring an academic career. For each semester hour of credit earned, three laboratory hours a week for one semester. Only one of the following may be counted: Pharmacy 187J, 287J, 387J, Pharmacy PharmD 187J, 287J, 387J. Prerequisite: Completion of all first-year professional coursework and consent of the dean.

#### PHM 687K. Pharmacy Association Management Residency.

Experience working in a pharmacy association, including active involvement in some managerial aspect of the association. Eighteen hours of fieldwork a week for one semester. Only one of the following may be counted: Pharmacy 629D, 689D, Pharmacy PharmD 687K. Prerequisite: Pharmacy PharmD 384L (or Pharmacy 364D) and consent of instructor.

#### PHM 387M. Physical and Chemical Principles of Drugs.

Fundamental, introductory principles of pharmaceutics, including thermodynamics, kinetics, and other basic chemical principles related to drugs. Three lecture hours a week for one semester. Pharmacy 342C and Pharmacy PharmD 387M may not both be counted. Offered on the lettergrade basis only. Prerequisite: Admission to the professional pharmacy curriculum, and credit or registration for Pharmacy PharmD 187P (or Pharmacy 142P).

#### PHM 287N. Biopharmaceutics.

Complements the basic pharmaceutics principles covered in Pharmacy PharmD 387M. Subjects include core concepts in biopharmaceutics of drugs. Two lecture hours a week for one semester. Pharmacy 252C and Pharmacy PharmD 287N may not both be counted. Offered on the lettergrade basis only. Prerequisite: Admission to the professional pharmacy curriculum.

## PHM 187P. Physical and Chemical Principles of Drugs Laboratory.

Problem-based learning exercises to reinforce the material presented in Pharmacy PharmD 387M. One lecture hour and three laboratory hours a week for one semester. Pharmacy 142P and Pharmacy PharmD 187P may not both be counted. Offered on the letter-grade basis only. Prerequisite: Admission to the professional pharmacy curriculum, and credit or registration for Pharmacy PharmD 387M (or Pharmacy 342C).

#### PHM 187R. Exploratory Research in Pharmacy.

The student participates in ongoing in-depth research activities in pharmaceutics, medicinal chemistry, toxicology, pharmacology, pharmacy administration, pharmacy practice, or pharmacotherapy. At least seven research hours a week for one semester. May be repeated for credit. Prerequisite: Pharmacy PharmD 181R (or Pharmacy 151R) and admission to the Pharmacy Honors Program, or consent of the dean.

## PHM 288. Pharmacotherapeutics of Oncology and Transplant.

An integrated approach to the etiology and treatment of disease states related to oncology and transplants. The equivalent of two lecture hours per week for one semester. Pharmacy PharmD 685F (or Pharmacy 695F) and 288 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Pharmacy PharmD 181 and 184P, or consent of the dean.

#### PHM 288H. Pharmacy Honors Proposal and Tutorial Course.

Honors seminar; development of laboratory research proposal for approval by the Honors Program Committee. One lecture hour and three hours of independent research a week for one semester. Pharmacy 278H and Pharmacy PharmD 288H may not both be counted. Prerequisite: Admission to the Pharmacy Honors Program.

#### PHM 388K. Hospital Pharmacy.

Basic principles, standards, and procedures involved in providing professional pharmaceutical services in hospitals. Three lecture hours a week for one semester. Pharmacy 372K and Pharmacy PharmD 388K may not both be counted. Prerequisite: Admission to the professional pharmacy curriculum.

#### PHM 388M. Pharmaceutics.

General introduction to dosage forms, and the technology and pharmaceutical rationale fundamental to their development. Three lecture hours a week for one semester. Pharmacy 356C and Pharmacy PharmD 388M may not both be counted. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 387M (or Pharmacy 342C) and 187P (or Pharmacy 142P) and credit or registration for Pharmacy PharmD 188P (or Pharmacy 156P).

#### PHM 188P. Pharmaceutics Laboratory.

Laboratory course supporting the subjects discussed in Pharmacy PharmD 388M. One hour of pre-laboratory lecture and three laboratory hours a week for one semester. Pharmacy 156P and Pharmacy PharmD 188P may not both be counted. Prerequisite: Credit or registration for Pharmacy PharmD 388M (or Pharmacy 356C).

## PHM 189. Pharmacotherapeutics of the Reproductive System.

An integrated approach to the etiology and treatment of disease states related to reproductive health. The equivalent of one lecture hour per week for one semester. Pharmacy PharmD 385G (or Pharmacy 395G) and 189 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Pharmacy PharmD 181 and 184P, or consent of the dean.

#### PHM 489H. Pharmacy Honors Thesis and Tutorial Course.

Honors seminar; laboratory research project conducted under the supervision of one or more faculty members. One lecture hour and nine laboratory hours a week for one semester. Pharmacy 479H and Pharmacy PharmD 489H may not both be counted. Prerequisite: Pharmacy PharmD 288H (or Pharmacy 278H).

#### PHM 389K. Social Media and Consumer Healthcare.

An exploration of how social media is transforming healthcare and improving patient outcomes. Three lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 282E (or Pharmacy 262D), 182F (or Pharmacy 172E), and 182P (or Pharmacy 172P).

#### PHM 289P. Introduction to Clinical Skills Laboratory.

Designed to develop the practical skills necessary in a pharmacy setting, with a focus on patient histories, how to read and interpret patient

charts, adult immunizations (including APhA certification), and training and certification in CPR from American Heart Association facilitators. Laboratory includes practical application of pharmacy clinical skills. One lecture hour and three laboratory hours a week for one semester. Pharmacy 277P and Pharmacy PharmD 289P may not both be counted. Offered on the letter-grade basis only. Prerequisite: Current intern registration with the Texas State Board of Pharmacy 392S); and credit or registration for Pharmacy PharmD 685E (or Pharmacy 675E) and 184P (or Pharmacy 175P).

#### PHM 189S, 289S, 389S. Community Service Learning.

Community-based participatory projects designed to connect coursework and community service experiences. Past and present health issues specific to the Texas region (such as United States-Mexico border issues), national and regional health initiatives, service challenges and opportunities, as well as personal/professional identities and responsibilities to the community. Projects developed in consultation with a faculty mentor and a selected community site. Includes an academic service-learning component. For each semester credit hour earned, one lecture hour a week for one semester; with a minimum of two fieldwork hours a week at a service-learning site to be arranged. Only one of the following may be counted: Pharmacy 169S, 269S, 369S, Pharmacy PharmD 189S, 289S, 389S. Offered on the letter-grade basis only. Prerequisite: Completion of the second professional year in the College of Pharmacy.

## PHM 190. Pharmacotherapeutics of Dermatology and Inflammatory Processes.

An integrated approach to the etiology and treatment of disease states of the dermis. Includes inflammatory responses. The equivalent of one lecture hour per week for one semester. Pharmacy PharmD 685D (or Pharmacy 665E) and 190 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Pharmacy PharmD 181, PHM 184P, or consent of the dean.

#### PHM 390C. Communication Skills for Health Professionals.

Designed for pharmacy, pre-pharmacy, premedical, predental, and nursing students. Enhancement of verbal communication skills for professional and public presentations, patient consultations, and interviewing. Three lecture hours a week for one semester. Only one of the following may be counted: Pharmacy 370C, Pharmacy PharmD 370C, or Pharmacy PharmD 390C. Offered on the letter-grade basis only.

#### PHM 290D. Nutritional Aspects of Clinical Pharmacy.

Explores the interrelationships of nutrition, disease, and drug therapy, including aspects of both normal and clinical nutrition, nutritional deficiencies, and the metabolic consequences or diseases associated with malnutrition. Patient case studies examine both the effects of drug therapy on nutrition and the effects of nutrition on drug therapy. Disease states covered include cardiovascular disease, diabetes, hepatic and renal failure, and anemia. Two lecture hours a week for one semester. Pharmacy 270D and Pharmacy PharmD 290D may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Pharmacy PharmD 685F (or Pharmacy 695F) and 385G (or Pharmacy 395G).

#### PHM 390K. Clinical Management of Drug-Drug Interactions.

Group discussions with an emphasis on clinically relevant drug-drug interactions, mechanisms, significance, and clinical management. Three lecture hours a week for one semester. Prerequisite: Completion of the second professional year in the College of Pharmacy and consent of instructor.

#### PHM 290L. Introduction to Nuclear Pharmacy.

An overview of nuclear pharmacy, a recognized specialty area of pharmacy practice focusing on the compounding and dispensing of radioactive materials for use in nuclear medicine procedures (therapeutic, diagnostic, and imaging). Two lecture hours a week for one semester. Pharmacy 270N and Pharmacy PharmD 290L may not both be counted. Prerequisite: Pharmacy PharmD 287N (or Pharmacy 252C), 190P (or Pharmacy 171P) and 390N (or Pharmacy 371S); or consent of instructor.

#### PHM 290M. Inpatient Adult Medicine.

Clinical therapeutic management of adult patients in an inpatient, institutional (primarily hospital) setting. Two lecture hours a week for one semester. Pharmacy 270M and Pharmacy PharmD 290M may not both be counted. Offered on the letter-grade basis only. Prerequisite: Completion of the second professional year in the College of Pharmacy.

#### PHM 390N. Integrated Basic and Applied Pharmacokinetics.

Introduction to pharmacokinetic principles; and the application of principles to specific drugs and patient situations. Three lecture hours a week for one semester. Pharmacy 371S and Pharmacy PharmD 390N may not both be counted. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 387M (or Pharmacy 342C), 187P (or Pharmacy 142P), 287N (or Pharmacy 252C), 388M (or Pharmacy 356C), and 188P (or Pharmacy 156P); and credit or registration for Pharmacy PharmD 171P (or Pharmacy 171P), 675E (or Pharmacy 675E), and 175P (or Pharmacy 175P).

## PHM 190P. Integrated Basic and Applied Pharmacokinetics Laboratory.

Problem-based and case-based application of pharmacokinetic principles to specific drugs and patient situations. One lecture hour and three laboratory hours a week for one semester. Pharmacy 171P and Pharmacy PharmD 190P may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Pharmacy PharmD 390N (or Pharmacy 371S).

#### PHM 390S. Interprofessional Community Service Learning.

Integration of community service with contemporary pharmacy practice, with a focus on social justice and social determinants of health care. Weekly online didactic modules, a minimum of fifty hours of service learning practicum with a community partner, and twice monthly group meetings. Pharmacy 370S and Pharmacy PharmD 390S may not both be counted. Offered on the letter-grade basis only. Prerequisite: Completion of the second professional year in the College of Pharmacy.

#### PHM 390T. Pharmacy International Exchange.

Work in an exchange program with international colleges and schools of pharmacy as partners. Examination of similarities and differences between pharmacy education, professional practice, and/or research in the hosting country and in the United States. Forty hours of fieldwork a week for one semester. Pharmacy 390T and Pharmacy PharmD 390T may not both be counted. Prerequisite: Completion of the first professional year in the College of Pharmacy and consent of instructor.

#### PHM 390V. Patient Safety.

Covers methods to ensure patient safety, prevent misadventures, and develop policy associated with patient safety and misadventure prevention. Three lecture hours a week for one semester. Only one of the following may be counted: Pharmacy 361J (Topic: Patient Safety and You), 390V, and Pharmacy PharmD 390V. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 284M (or Pharmacy 266P).

#### PHM 290W. Health Leadership.

Develops skills necessary to identify and establish professional goals, build and lead teams, delegate effectively, resolve conflicts, network for career advancement, document leadership experiences/abilities on curriculum vitae and in recommendation letters, and demonstrate leadership abilities during job interviews. Two lecture hours a week for one semester. Only one of the following may be counted: Pharmacy 261J (Topic: Health Leaders), 290W or Pharmacy PharmD 290W. Offered on the letter-grade basis only.

#### PHM 291. Pharmacotherapeutics of Pain and Addiction.

An integrated approach to the etiology and treatment of disease states related to pain and addiction. The equivalent of two lecture hours per week for one semester. Pharmacy PharmD 685F (or Pharmacy 695F) and 291 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Pharmacy PharmD 181 or consent of the dean.

#### PHM 291K. Pediatric Pharmacotherapy.

Pathophysiology and pharmacotherapy of selected pediatric diseases. Designed to expose students to pediatric pharmacy as a potential area of focus, and to prepare them for a potential residency or practice in providing pharmaceutical care in a pediatric setting. Two lecture hours a week for one semester. Pharmacy 282Q and Pharmacy PharmD 291K may not both be counted. Prerequisite: Completion of the first professional year in the College of Pharmacy.

#### PHM 191L. Leadership in Community Service Learning.

Designed for students enrolled in Pharmacy PharmD 390S and 381H who elect to serve in a leadership role for the community service-learning project. Involves coordination and organization of responsibilities at each phase of the project, communication with community partners, and additional outreach based on the needs of the community partner. Includes development of a plan and disseminate of the project outcomes. A minimum of six in-person meetings with the instructor, with additional meetings scheduled as needed, including online and by telephone. Pharmacy 171L and Pharmacy PharmD 191L may not both be counted. Prerequisite: Credit or registration for Pharmacy PharmD 390S (or Pharmacy 370s) or 381H (or Pharmacy 381H).

#### PHM 291M. Introduction to Ambulatory Care Pharmacy.

Clinical and non-clinical topics relevant to treating commonly encountered disease states, effectively communicating with patients, and managing a clinical pharmacy practice in an ambulatory setting. Emphasis on application of concepts learned in previous classes to realworld situations. Two lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Graduate standing; Pharmacy PharmD 282E, and 182F, and 182P.

## PHM 191U. Foundations for Interprofessional Collaborative Practice I.

Restricted to students in the College of Pharmacy. Introduces and reinforces interprofessional education core competencies delivered through classroom-based interactive sessions, simulations, field-based immersive experiences, and experiential learning with students and members of other professions. Imparts the foundational knowledge and skills necessary for the delivery of quality and safe patient-centered and population-oriented care as a contributing member of a healthcare team. One lecture hour per week and six interprofessional sessions for one semester. Offered on the letter-grade basis only.

## PHM 191V. Foundations for Interprofessional Collaborative Practice II.

Restricted to students in the College of Pharmacy. Introduces and reinforces interprofessional education core competencies delivered

through classroom-based interactive sessions, simulations, field-based immersive experiences, and experiential learning with students and members of other professions. Imparts the foundational knowledge and skills necessary for the delivery of quality and safe patient-centered and population-oriented care as a contributing member of a healthcare team. One lecture hour per week and six interprofessional sessions for one semester. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 191U.

#### PHM 391W. Leadership and Advocacy in Pharmacy.

A discussion forum for exploring current legislative and regulatory issues influencing the pharmacy profession. Focuses on retrieving legislative and regulatory information, interpreting legislation, regulations and their potential impacts, engaging in discussion on various perspectives of the issues and presenting information on legislation and regulations that impact pharmacy practice. Three lecture hours a week for one semester. Only one of the following may be counted: Pharmacy 361J (Topic: Leadership and Advocacy in Pharmacy), 391W, and Pharmacy PharmD 391W. Offered on the letter-grade basis only. Prerequisite: Admission to the professional pharmacy curriculum.

#### PHM 292. Pharmacotherapeutics of Psychiatric Disorders.

An integrated approach to the etiology and treatment of disease states related to psychiatrics. The equivalent of two lecture hours per week for one semester. Pharmacy PharmD 685F (or Pharmacy 695F) and 292 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Pharmacy PharmD 181 or consent of the dean.

#### PHM 292G, 392G. Herbal and Botanical Supplements.

A practice-based approach to learning about the most common herbal and botanical supplements in a pharmacy practice setting, including review of studies of popular uses, clinical indications, pharmacological effects, mechanisms of action, side effects, contraindications, and common dosage guidelines. Discussion of the legal, regulatory, and ethical aspects, in addition to analyzing manufacturing quality issues and counterfeit products is also addressed. For each semester hour of credit earned, one lecture hour a week for one semester. Only one of the following may be counted: Pharmacy 292G, 392G, Pharmacy PharmD 292G, 392G. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 282E (or Pharmacy 262D), 195Q (or Pharmacy 163C), and 182F (or Pharmacy 172E).

#### PHM 392P. Patient Assessment Skills Laboratory.

Introduction to patient assessment techniques skills needed to provide pharmaceutical care. Two lecture hours and three laboratory hours a week for one semester. Pharmacy 392S and Pharmacy PharmD 392P may not both be counted. Offered on the letter-grade basis only. Prerequisite: Current intern registration with the Texas State Board of Pharmacy, and Pharmacy PharmD 480C (or Pharmacy 253C) and 480D (or Pharmacy 253D).

## PHM 192U. Foundations for Interprofessional Collaborative Practice III.

Restricted to students in the College of Pharmacy. Introduces and reinforces interprofessional education core competencies delivered through classroom-based interactive sessions, simulations, field-based immersive experiences, and experiential learning with students and members of other professions. Imparts the foundational knowledge and skills necessary for the delivery of quality and safe patient-centered and population-oriented care as a contributing member of a healthcare team. One lecture hour per week and six interprofessional sessions for one semester. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 191V.

## PHM 192V. Foundations for Interprofessional Collaborative Practice IV.

Restricted to students in the College of Pharmacy. Introduces and reinforces interprofessional education core competencies delivered through classroom-based interactive sessions, simulations, field-based immersive experiences, and experiential learning with students and members of other professions. Imparts the foundational knowledge and skills necessary for the delivery of quality and safe patient-centered and population-oriented care as a contributing member of a healthcare team. One lecture hour per week and six interprofessional sessions for one semester. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 192U.

#### PHM 193. Pharmacotherapeutics of Neurologic Disorders.

An integrated approach to the etiology and treatment of disease states related to neurology. The equivalent of one lecture hour per week for one semester. Pharmacy PharmD 385H (or Pharmacy 396D) and 193 may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Pharmacy PharmD 181 or consent of the dean.

#### PHM 693C. Ambulatory Care Pharmacy Practice.

Analysis of pharmacotherapy, evaluation of drug use, and synthesis of rational drug regimens in the context of ambulatory patient care. Forty laboratory hours a week for at least six weeks, with additional hours to be arranged. Pharmacy 693C and Pharmacy PharmD 693C may not both be counted. Offered on the credit/no credit basis only. Prerequisite: Current intern registration with the Texas State Board of Pharmacy and completion of all didactic and laboratory coursework prior to the fourth professional year in the College of Pharmacy; during the fall and spring semesters, concurrent enrollment in two of the following: Pharmacy PharmD 693E (or Pharmacy 693E), 693N (or Pharmacy 693N), 693P (or Pharmacy 693P), 693S (or Pharmacy 693S), 694C (or Pharmacy 694C), 694E (or Pharmacy 694E), 694S (or Pharmacy 694S), or 695E (or Pharmacy 695E).

#### PHM 693E. Elective in Pharmacy Practice I.

Experience in pharmacy practice, research, or administration. Forty laboratory hours a week for at least six weeks, with additional hours to be arranged. Pharmacy 693E and Pharmacy PharmD 693E may not both be counted. Offered on the credit/no credit basis only. Prerequisite: Current intern registration with the Texas State Board of Pharmacy and completion of all didactic and laboratory coursework prior to the fourth professional year in the College of Pharmacy; during the fall and spring semesters, concurrent enrollment in two of the following: Pharmacy PharmD 693C (or Pharmacy 693C), 693N (or Pharmacy 693N), 693P (or Pharmacy 693P), 693S (or Pharmacy 693S), 694C (or Pharmacy 694C), 694E (or Pharmacy 694E), 694S (or Pharmacy 694S), or 695E (or Pharmacy 695E).

#### PHM 693N. Advanced Hospital Pharmacy Practice.

Analysis of pharmacotherapy, evaluation of drug use, synthesis of rational drug regimens, and dispensing of medications in the context of institutional patient care. Forty laboratory hours a week for at least six weeks, with additional hours to be arranged. Pharmacy 693N and Pharmacy PharmD 693N may not both be counted. Offered on the credit/ no credit basis only. Prerequisite: Current intern registration with the Texas State Board of Pharmacy and completion of all didactic and laboratory coursework prior to the fourth professional year in the College of Pharmacy; during the fall and spring semesters, concurrent enrollment in two of the following: Pharmacy PharmD 693C (or Pharmacy 693C), 693P (or Pharmacy 693P), 693S (or Pharmacy 693S), 694C (or Pharmacy 694C), 694E (or Pharmacy 694E), 694S (or Pharmacy 694S), or 695E (or Pharmacy 695E).

#### PHM 693P. Advanced Community Pharmacy Practice.

Analysis of pharmacotherapy, evaluation of drug use, synthesis of rational drug regimens, and dispensing of medications in the context of community-based patient care. Forty laboratory hours a week for at least six weeks, with additional hours to be arranged. Pharmacy 693P and Pharmacy PharmD 693P may not both be counted. Offered on the credit/no credit basis only. Prerequisite: Current intern registration with the Texas State Board of Pharmacy and completion of all didactic and laboratory coursework prior to the fourth professional year in the College of Pharmacy; during the fall and spring semesters, concurrent enrollment in two of the following: Pharmacy PharmD 693C (or Pharmacy 693C), 693E (or Pharmacy 693E), 693N (or Pharmacy 693N), 693S (or Pharmacy 693S), 694C (or Pharmacy 694C), 694E (or Pharmacy 694E), 694S (or Pharmacy 694S), or 695E (or Pharmacy 695E).

#### PHM 693R. Supplemental Rotation in Pharmacy Practice I.

Analysis of pharmacotherapy, evaluation of drug use, and synthesis of rational drug regimens in the context of patient care. Forty laboratory hours a week for at least six weeks, with additional hours to be arranged. May be repeated for credit. Offered on the credit/no credit basis only. Prerequisite: Current intern registration with the Texas State Board of Pharmacy and completion of all didactic and laboratory coursework prior to the fourth professional year in the College of Pharmacy.

#### PHM 693S. Selective in Pharmacy Practice I.

Analysis of pharmacotherapy, evaluation of drug use, and synthesis of rational drug regimens in a selected pharmacy practice environment. Forty laboratory hours a week for at least six weeks, with additional hours to be arranged. Pharmacy 693S and Pharmacy PharmD 693S may not both be counted. Offered on the credit/no credit basis only. Prerequisite: Current intern registration with the Texas State Board of Pharmacy and completion of all didactic and laboratory coursework prior to the fourth professional year in the College of Pharmacy; during the fall and spring semesters, concurrent enrollment in two of the following: Pharmacy PharmD 693C (or Pharmacy 693C), 693E (or Pharmacy 693E), 693N (or Pharmacy 693N), 693P (or Pharmacy 693P), 694C (or Pharmacy 694C), 694E (or Pharmacy 694E), 694S (or Pharmacy 694S), or 695E (or Pharmacy 695E).

## PHM 193U. Foundations for Interprofessional Collaborative Practice V.

Restricted to students in the College of Pharmacy. Introduces and reinforces interprofessional education core competencies delivered through classroom-based interactive sessions, simulations, field-based immersive experiences, and experiential learning with students and members of other professions. Imparts the foundational knowledge and skills necessary for the delivery of quality and safe patient-centered and population-oriented care as a contributing member of a healthcare team. One lecture hour per week and six interprofessional sessions for one semester. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 192V.

## PHM 193V. Foundations for Interprofessional Collaborative Practice VI.

Restricted to students in the College of Pharmacy. Introduces and reinforces interprofessional education core competencies delivered through classroom-based interactive sessions, simulations, field-based immersive experiences, and experiential learning with students and members of other professions. Imparts the foundational knowledge and skills necessary for the delivery of quality and safe patient-centered and population-oriented care as a contributing member of a healthcare team. One lecture hour per week and six interprofessional sessions for one semester. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 193U.

#### PHM 693W. Elective International Pharmacy Experience.

Competitive placement for an international advanced pharmacy experience. Forty laboratory hours a week for at least six weeks, with additional hours to be arranged. Pharmacy 693W and Pharmacy PharmD 693W may not both be counted. Offered on the credit/no credit basis only. Prerequisite: Current intern registration with the Texas State Board of Pharmacy and completion of all didactic and laboratory coursework prior to the fourth professional year in the College of Pharmacy.

#### PHM 694C. Inpatient General Medicine Pharmacy Practice.

Analysis of pharmacotherapy, evaluation of drug use, and synthesis of rational drug regimens in the context of acute patient care. Forty laboratory hours a week for at least six weeks, with additional hours to be arranged. Pharmacy 694C and Pharmacy PharmD 694C may not both be counted. Offered on the credit/no credit basis only. Prerequisite: Current intern registration with the Texas State Board of Pharmacy and completion of all didactic and laboratory coursework prior to the fourth professional year in the College of Pharmacy; during the fall and spring semesters, concurrent enrollment in two of the following: Pharmacy PharmD 693C (or Pharmacy 693C), 693E (or Pharmacy 693E), 693N (or Pharmacy 693N), 693P (or Pharmacy 693P), 693S (or Pharmacy 693S), 694E (or Pharmacy 694E), 694S (or Pharmacy 694S), or 695E (or Pharmacy 695E).

#### PHM 694E. Elective in Pharmacy Practice II.

Experience in pharmacy practice, research, or administration. Forty laboratory hours a week for at least six weeks, with additional hours to be arranged. Pharmacy 694E and Pharmacy PharmD 694E may not both be counted. Offered on the credit/no credit basis only. Prerequisite: Current intern registration with the Texas State Board of Pharmacy and completion of all didactic and laboratory coursework prior to the fourth professional year in the College of Pharmacy; during the fall and spring semesters, concurrent enrollment in two of the following: Pharmacy PharmD 693C (or Pharmacy 693C), 693E (or Pharmacy 693E), 693N (or Pharmacy 693N), 693P (or Pharmacy 693P), 693S (or Pharmacy 693S), 694C (or Pharmacy 694C), 694S (or Pharmacy 694S), or 695E (or Pharmacy 695E).

#### PHM 394F. Pharmacoeconomics.

Terms, concepts, procedures, methods, problems, and strengths associated with pharmacoeconomics. Three lecture hours a week for one semester. Only one of the following may be counted: Pharmacy 393T, 394F, Pharmacy Graduate Studies 393T, Pharmacy PharmD 394F. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 384L (or Pharmacy 364D) or consent of instructor.

#### PHM 694R. Supplemental Rotation in Pharmacy Practice II.

Analysis of pharmacotherapy, evaluation of drug use, and synthesis of rational drug regimens in the context of patient care. Forty laboratory hours a week for at least six weeks, with additional hours to be arranged. May be repeated for credit. Offered on the credit/no credit basis only. Prerequisite: Current intern registration with the Texas State Board of Pharmacy and completion of all didactic and laboratory coursework prior to the fourth professional year in the College of Pharmacy.

#### PHM 694S. Selective in Pharmacy Practice II.

Analysis of pharmacotherapy, evaluation of drug use, and synthesis of rational drug regimens in selected pharmacy practice environments. Forty laboratory hours a week for at least six weeks, with additional hours to be arranged. Pharmacy 694S and Pharmacy PharmD 694S may not both be counted. Offered on the credit/no credit basis only. Prerequisite: Current intern registration with the Texas State Board of Pharmacy and completion of all didactic and laboratory coursework prior to the fourth professional year in the College of Pharmacy; during the fall and spring semesters, concurrent enrollment in two of the following: Pharmacy PharmD 693C (or Pharmacy 693C), 693E (or Pharmacy 693E), 693N (or Pharmacy 693N), 693P (or Pharmacy 693P), 693S (or Pharmacy 693S), 694C (or Pharmacy 694C) 694E (or Pharmacy 694E), or 695E (or Pharmacy 695E).

#### PHM 695E. Elective in Pharmacy Practice III.

Experience in pharmacy practice, research, or administration. Forty laboratory hours a week for at least six weeks, with additional hours to be arranged. Pharmacy 695E and Pharmacy PharmD 695E may not both be counted. Offered on the credit/no credit basis only. Prerequisite: Current intern registration with the Texas State Board of Pharmacy and completion of all didactic and laboratory coursework prior to the fourth professional year in the College of Pharmacy; during the fall and spring semesters, concurrent enrollment in two of the following: Pharmacy PharmD 693C (or Pharmacy 693C), 693E (or Pharmacy 693E), 693N (or Pharmacy 693N), 693P (or Pharmacy 693P), 693S (or Pharmacy 693S), 694C (or Pharmacy 694C) 694E (or Pharmacy 694E) or 694S (or Pharmacy 694S).

## PHM 195P. Drug Information and Evidence-Based Practice Laboratory.

Practical application of the concepts presented in Pharmacy 195Q. Includes assignments, projects, and oral presentations. Three laboratory hours a week for one semester. Pharmacy 163P and Pharmacy PharmD 195P may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Pharmacy PharmD 282E (or Pharmacy 262D), 195Q (or Pharmacy 163C), and 685D (or Pharmacy 665E).

#### PHM 195Q. Drug Information and Evidence-Based Practice.

Knowledge and skills needed to retrieve and interpret drug information. Interpretation of biomedical literature and an introduction to concepts of evidence-based practice. One lecture hour a week for one semester. Pharmacy 163C and Pharmacy PharmD 195Q may not both be counted. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 287D (or Pharmacy 242D); or credit or registration for Pharmacy PharmD 282E (or Pharmacy 262D), 195P (or Pharmacy 163P), and 685D (or Pharmacy 665E).

#### PHM 295R. Advanced Evidence-Based Practice.

Research methodology and biostatistical concepts as they relate to the interpretation and critical evaluation of biomedical literature. Designed to build upon the material covered in Pharmacy PharmD 195Q. Two lecture hours a week for one semester. Pharmacy 295R and Pharmacy PharmD 295R may not both be counted. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 195Q (or Pharmacy 163C), 195P (or Pharmacy 163P), 185P (or Pharmacy 185P), 685F (or Pharmacy 695F), and 385G (or Pharmacy 395G).

#### PHM 398T. College Teaching Methodology.

Interdisciplinary course intended to provide a foundation of theoretical and practical knowledge relating to teaching at the postsecondary level. Subjects include instructional methods, instructional design, practice teaching, teaching philosophy, instructional technology, and assessment of learning. Includes class discussions and individual consultations. Three lecture hours a week for one semester. Only one of the following may be counted: Pharmacy 368T, 398T, Pharmacy Graduate Studies 398T, Pharmacy PharmD 398T. Offered on the letter-grade basis only. Prerequisite: Completion of the second professional year in the College of Pharmacy, or consent of instructor.

## Lyndon B. Johnson School of Public Affairs

Angela Evans, MA, *Dean* David Springer, PhD, *Associate Dean (Interim)* http://www.utexas.edu/lbj/

## **General Information and Courses**

The Lyndon B. Johnson School of Public Affairs offers the Master of Global Policy Studies, the Master of Public Affairs, and the Doctor of Philosophy with a major in public policy. Information is given in the *Graduate Catalog* (http://catalog.utexas.edu/graduate/fields-of-study/public-affairs) about these programs and about the requirements for admission to graduate study.

In addition to the graduate courses described in the *Graduate Catalog* (http://catalog.utexas.edu/graduate/fields-of-study/public-affairs/ graduate-courses), the faculty has approval to offer the following courses in the academic years 2018-2019 and 2019-2020; however, not all courses are taught each semester or summer session. Students should consult the *Course Schedule* (http://registrar.utexas.edu/ schedules) to determine which courses and topics will be offered during a particular semester or summer session. The *Course Schedule* (http:// registrar.utexas.edu/schedules) may also reflect changes made to the course inventory after the publication of this catalog.

A full explanation of course numbers is given in *General Information* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/credit-value-and-course-numbers). In brief, the first digit of a course number indicates the semester hour value of the course. The second and third digits indicate the rank of the course; if they are 01 through 19, the course is of lower-division rank; if 20 through 79, of upper-division rank; if 80 through 99, of graduate rank.

## Public Affairs: P A

#### **Lower-Division Courses**

#### P A 310C. Public Policy.

Skill topics, including economics, quantitative methods, public financial management, policy development, and public administration. Three lecture hours a week for one semester. Public Affairs 310C and 330C may not both be counted unless the topics vary. May be repeated for credit when the topics vary.

#### P A 310S. Public Policy Seminar.

Seminar with topics related to domestic or international public policy. Three lecture hours a week for one semester. Public Affairs 310S and 330S may not both be counted unless the topics vary. May be repeated for credit when the topics vary.

#### **Upper-Division Courses**

#### P A 325. Topics in Policy.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

**Topic 1: Advanced Seminar in Ethical Leadership.** Public Affairs 325 (Topic: Advanced Seminar in Ethical Leadership) and 325 (Topic 1) may not both be counted.

**Topic 2: Defense Policy.** Only one of the following may be counted: Government 360N (Topic: Defense Policy), 360N (Topic: Defense Policy: Honors), Liberal Arts Honors 350 (Topic: Defense Policy), 350 (Topic 1), Public Affairs 325 (Topic: Defense Policy), 325 (Topic: Defense Policy: Honors), 325 (Topic 2).

#### P A 326. Topics in Policy.

Three lecture hours a week for one semester. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

#### P A 330C. Public Policy.

Skill topics, including economics, quantitative methods, public financial management, policy development, and public administration. Three lecture hours a week for one semester. Public Affairs 310C and 330C may not both be counted unless the topics vary. May be repeated for credit when the topics vary.

#### P A 330S. Public Policy Seminar.

Seminar with topics related to domestic or international public policy. Three lecture hours a week for one semester. Public Affairs 310S and 330S may not both be counted unless the topics vary. May be repeated for credit when the topics vary.

#### P A 150. Public Service and Practice.

Restricted to sophomore, junior, and senior-level undergraduates. Topics related to public service fields and the skills used by effective leaders. One lecture hour a week for one semester, with additional hours for some topics. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: Upper-division standing.

#### P A 150S. Issues in Public Service.

Topics in issues and decision-making that arise in the practice of public service. One lecture hour a week for one semester, with additional hours for some topics. May be repeated for credit when the topics vary. Offered on the letter-grade basis only. Prerequisite: Upper-division standing.

#### P A 159R. Public Policy Issues.

Current issues in public policy. The equivalent of one lecture hour a week for one semester, with additional hours to be arranged. May be repeated for credit when the topics vary. Offered on the pass/fail basis only.

**Topic 1: UT Energy Symposium.** Only one of the following may be counted: Public Affairs 158S (Topic: UT Energy Symposium), 159R (Topic: UT Energy Symposium), 159R (Topic 1), 159S (Topic: UT Energy Symposium). Offered on the pass/fail basis only. Additional prerequisite: Upper-division standing.

#### P A 159S. Public Policy Issues.

Current issues in public policy. Hours to be arranged. May be repeated for credit when the topics vary.

#### P A 159T. Public Policy Issues.

Current issues in public policy. Hours to be arranged. May be repeated for credit when the topics vary. Offered on the letter-grade basis only.

## Steve Hicks School of Social Work

#### Luis H. Zayas, PhD, Dean

Allan H. Cole Jr., PhD, Associate Dean, Academic Affairs Cossy Hough, LCSW, Assistant Dean, Undergraduate Programs Sarah Swords, LCSW, Assistant Dean, Master's Programs Tanya Voss, MSSW, Assistant Dean, Field Education Cynthia G.S. Franklin, PhD, Associate Dean, Doctoral Education Catherine Cubbin, PhD, Associate Dean, Research Barbara L. Jones, PhD, Associate Dean, Health Affairs https://socialwork.utexas.edu/

## **General Information**

### Accreditation

The bachelor of social work degree program is accredited by the Council on Social Work Education.

### Mission

The Steve Hicks School of Social Work provides professional education and leadership in social work practice, research, and service to promote social and economic justice, enhance social welfare, and build strong community-University partnerships.

The mission of the Bachelor of Social Work (BSW) program is to prepare students as beginning level generalist professional social work practitioners who are committed to the provision of services that further the well-being of people and who promote social and economic justice. Building on a broad liberal arts framework, the BSW curriculum is designed to develop generalist practitioners who have an understanding of social work knowledge and values and are able to select different methods and resources to meet identified client needs, while recognizing and engaging the strengths of the client in the process. The curriculum offers students the opportunity to learn to promote, restore, maintain, and enhance the social functioning of multiple levels of systems in the environment, including individuals, families, small groups, organizations, and communities; to recognize worker and client limitations; and to know when to refer clients to other resources.

The BSW student is given the opportunity to learn to work collaboratively in a variety of settings using an ecosystems/developmental perspective; to recognize the relationships between client needs and public issues; to work toward the development of social policies, resources, and programs that meet basic human needs and empower at-risk groups; and to be sensitive to the diversities among individuals, including ethnicity, gender, age, sexual orientation, religion, and ability. The program is intended to prepare reflective, self-evaluating practitioners who have a strong identification with the social work profession and work to alleviate poverty, oppression, and discrimination.

Graduates of the program are expected to be able to enhance the problem-solving, coping, and developmental capacities of individuals, especially those from at-risk populations. They also are expected to contribute to the effective and humane operation of the systems within the environment that provide individuals with resources, services, and opportunities; to link individuals in need with the appropriate systems; and to contribute to the development and improvement of social policies that have an impact on people and their social environments, especially by empowering at-risk groups and by promoting social and economic justice. The BSW program is integrated with and builds upon a liberal arts base that includes knowledge in language arts, the humanities, and the social, behavioral, and natural sciences. The curriculum includes content in social work values, diversity and at-risk populations, social and economic justice, human behavior and the social environment, research, social welfare policy and services, and social work intervention.

## **Program Objectives**

Students graduating from the BSW program are expected to demonstrate the following characteristics:

- 1. A professional identity that incorporates the values and ethics of the social work profession and the professional development of self.
- 2. The ability to work with diverse populations with an understanding of, and respect for, the positive value of diversity, including ethnicity, gender, sexual orientation, age, ability, and religion, and to use communication skills differentially with diverse groups.
- 3. An understanding of the forms and mechanisms of oppression and discrimination.
- The ability to apply strategies and skills that advance social and economic justice and to address the oppression of at-risk populations.
- 5. An understanding of the biological, psychological, social, and cultural contexts of changing client systems, including individuals, families, groups, organizations, communities, and the broader society, and their effects on development and behavior.
- Beginning level competencies in research and evaluation, including the ability to evaluate research studies and apply their findings to practice, and, under supervision, evaluate their own practice interventions and those of other relevant systems.
- 7. An understanding of how social policy develops and differentially affects various client systems, workers, and agencies.
- 8. An understanding of the role the social work profession has played in promoting social change, historically and currently.
- 9. The attainment of knowledge and skills that demonstrate the ability to practice effectively with individuals, families, groups, organizations, and communities, in a manner that empowers client systems and uses their strengths in order to maximize their health and well-being.
- 10. An ability to apply critical thinking skills within the context of professional social work roles and practice.
- An awareness of their responsibility to continue their professional growth and development, including the use of supervision appropriate to generalist practice.

## History

The Steve Hicks School of Social Work was established as a graduate program in 1949 and began classes in the fall of 1950 with 24 students enrolled in the Master of Science in Social Work (MSSW) program. Undergraduate courses in social work were first offered in 1958. These were incorporated into a full Bachelor of Social Work (BSW) program in the fall of 1974.

The first BSW degree was awarded in December 1977. Since that time, the program has been strengthened by curriculum modifications reflecting changes in the profession and in society that have implications for beginning social work practice.

The Steve Hicks School of Social Work also offers programs leading to the Master of Science in Social Work and the Doctor of Philosophy. These are described in the *Graduate Catalog* (http://catalog.utexas.edu/graduate/fields-of-study/social-work).

## Facilities

The Steve Hicks School of Social Work Building (1925 San Jacinto Boulevard) provides space for social work classes, including classrooms equipped for distance learning and an instructional technology classroom; offices for faculty and staff; an advising center and student services area; and a student lounge. The building also houses the Learning Resource Center (LRC), which has an extensive collection of social work related books, journals, and other publications partially funded by the Josleen Lockhart Memorial Book Fund. The LRC includes a computer laboratory for student use and provides space, equipment, and technical assistance for studying, meetings of small groups of students, viewing audiovisual materials, videotaping, and completing other skillsbased learning assignments. The Steve Hicks School of Social Work Building also houses the Center for Social Work Research, the DiNitto Center for Career Services, and Con Mi Madre.

# Financial Assistance Available through the School

Although many University scholarships are awarded through the Office of Financial Aid, a limited number are awarded by the Steve Hicks School of Social Work to undergraduate social work students. Awards are made for reasons ranging from academic promise to financial need. Scholarship information, including eligibility requirements and the application process, is available through the Office of Academic Affairs. Additional scholarships funded by yearly contributions to the Steve Hicks School of Social Work are awarded to undergraduate social work students who are nominated by faculty on the basis of academic excellence, financial need and potential contributions to the social work profession.

## **Student Services**

### **Academic Advising**

The Office of Academic Affairs in the Steve Hicks School of Social Work seeks to assist the student in exploring social work as a career choice, in planning an academic program suited to the student's interests and talents, in seeking help with academic or personal problems, and in postgraduation planning, whether for employment or for further study. The Office of Academic Affairs also provides administrative support and student services, including maintenance of academic records, provision of official degree audits, and graduation certification for social work majors. Faculty and staff members are also available to assist students with questions about scholarship programs, degree requirements, rules and regulations, and other available campus services. Students who declare an interest in completing the social work program are required to meet with a social work adviser at least once each semester for academic advising. To arrange an appointment with an adviser, students should contact the Office of Academic Affairs.

During the student's first and second academic years, the student and the adviser discuss the student's career choice, the selection of a major, degree requirements, and requirements for admission to the major and to upper-division courses in social work; during the third year, the course work required for the major and the student's preparation for entry into the field practicum; and during the fourth year, the field practicum and the student's post-graduation plans.

### **Career Choice Information**

Students interested in social work as a career are encouraged to discuss this interest at any time with a social work adviser. Advisers are available in the Office of Academic Affairs to help students explore social work practice and settings and the development of interest in social work through academic, volunteer and service learning experiences. Students are encouraged to use the variety of career services available through the DiNitto Center for Career Services (http://www.utexas.edu/ssw/dccs).

Members of the social work faculty are available to assist the student in choosing a career, as are the staff and resources of the University's Sanger Learning Center, the Volunteer and Service Learning Center, and the Center for Strategic Advising and Career Counseling in the School of Undergraduate Studies. Since the social work program requires admission to the major and completion of 122 semester hours, students are encouraged to discuss their interest in social work as a career early in their studies.

### **Career Services**

Career development services are provided to students preparing to enter the professional job market. Students should inquire in the DiNitto Center for Career Services, Steve Hicks School of Social Work Building 2.214. The office maintains a listserv of employment opportunities and provides information about social work careers, graduate programs, online resources, and other opportunities for professional development, volunteer and service learning placements, and social work licensure. Workshops and other programs are offered on the fields of social work practice, résumé preparation, and job search and interview skills.

Professional social workers may seek employment in a number of areas. The Texas Department of Aging and Disability Services has established quality control standards that mandate the hiring of holders of BSW degrees in designated positions. The Texas Department of Family and Protective Services hires social workers for its child protective services programs, and the Texas Health and Human Services Commission hires BSW graduates for its client support services programs. Large nursing home facilities are also required to have a social work staff. Substance use disorder treatment programs, psychiatric hospitals, health care programs, school social work and dropout prevention programs, criminal justice programs, and programs for the elderly also employ social workers. More than a third of the program's graduates go on to graduate schools throughout the country.

As a complement to the assistance available from the school, the University's Sanger Learning Center in Jester Center and the Center for Strategic Advising and Career Counseling in the School of Undergraduate Studies provide comprehensive career services to all students. The centers offer professional assistance to students in choosing or changing their majors or careers, seeking an internship, and planning for the job search or for graduate study.

The University makes no promise to secure employment for each graduate.

## Social Work Council

The Social Work Council is an organization open to all students pursuing a social work degree or interested in the social work profession. The purposes of the council are to help students acquire a better understanding of the profession of social work, to provide a mechanism for student input on issues related to the social work curriculum and the school, and to organize and support social work related programs and projects that will benefit students, the school, the University, and the community.

Council activities are often conducted in collaboration with the Office of Academic Affairs. They include orientations to the BSW and MSSW programs, a career night, forums with guest speakers from community agencies and the University, community service projects, special interest groups that meet to discuss social work related topics, and social gatherings. Members of the Council represent student concerns as voting members of the school's curriculum committees, the Senate of College Councils, and the Student Government.

## **Professional Liability Insurance**

Students must purchase professional liability insurance while they are enrolled in the field practicum. The cost is about \$15 a semester. Payment is coordinated by the Field Office of the Steve Hicks School of Social Work. A criminal background check may be required as well.

## **Admission and Registration**

## Admission

### Admission to the University

Admission and readmission of undergraduate students to the University is the responsibility of the director of admissions. Information about admission to the University is provided in *General Information* (http:// catalog.utexas.edu/general-information/admission).

### **Admission Policies of the School**

The Steve Hicks School of Social Work maintains two classifications of undergraduate students: pre-social work majors and social work majors. Pre-social work majors are usually freshmen and sophomores. After completing the requirements below, a student may apply for admission to the professional curriculum as a social work major. Students who are admitted into the major complete at least three semesters of social work coursework and any other remaining degree requirements. Students who fulfill all degree requirements receive a Bachelor of Social Work degree.

The professional practice of social work requires people who are above average in academic ability and performance, sufficiently emotionally mature to assume a helping role with people under stress, and committed to the ethical standards and performance demands of social work practice. Students are encouraged to use the advising services in the Steve Hicks School of Social Work early in their college careers in anticipation of meeting requirements for admission to the major. A student who is interested in seeking a social work degree must discuss his or her intentions with a social work adviser before applying for admission to the program.

## Admission to the School as a Pre-Social Work Major

A student may transfer from another division of the University to the Steve Hicks School of Social Work in accordance with the regulations given in *General Information* (http://catalog.utexas.edu/generalinformation/registration-tuition-and-fees/transfer-from-one-division-toanother-within-the-university).

A University student who wants to transfer as a pre-social work major must meet the following requirements:

- 1. Completion of at least 12 semester hours of coursework in residence at the University. Credit earned by exam, correspondence, and extension may not be counted toward this requirement.
- 2. A cumulative in-residence grade point average of at least 2.00.
- 3. If social work coursework has been completed prior to the application, a grade point of at least 2.50 in those courses is required, and all social work courses must have been completed with a grade of at least *C*.

Only currently enrolled students may apply. Forms to apply for internal transfer are available through the Steve Hicks School of Social Work Office of Academic Affairs.

Admission to the Steve Hicks School of Social Work is offered on a space-available basis to the students who are best qualified.

Students with over 90 semester hours of coursework or a completed degree are encouraged to consider other options, such as completing a degree in their current college/school or alternate institution with the option of pursuing a MSSW degree at a later date.

### Admission to the Major in Social Work

No student may enter the professional curriculum (the required upperdivision social work courses) unless he or she has been admitted to the University as described in *General Information* (http://catalog.utexas.edu/ general-information/admission) and has been admitted to the major in social work by the assistant dean for undergraduate programs, following recommendation by the BSW Curriculum Committee, according to the procedures below. All students are considered according to the policies given in the editions of the General Information catalog and the Undergraduate catalog that are in effect at the time of the application.

The Steve Hicks School of Social Work considers students for admission to the major twice a year, during the fall and spring semesters. A student who enters the University as a freshman in a fall semester will usually apply for admission to the professional curriculum in the spring semester of the sophomore year or the fall semester of the junior year. Admission applications are distributed during mandatory information sessions held by the Office of Academic Affairs. The application allows the student to describe his or her background and motivation to enter the social work profession as well as any special experiences that enhance his or her application.

The Steve Hicks School of Social Work limits admission to the major to the number of students for whom a professional education of high quality can be provided. Because of enrollment restrictions dictated by the availability of faculty members and facilities, some applicants may be denied admission even though they meet the following minimum requirements.

- 1. The applicant must have completed at least 45 semester hours of coursework, including at least 30 hours chosen from the following requirements:
  - a. All requirements of the University's Core Curriculum (p. 23)
  - b. Sociology 302
  - c. Psychology 301
  - d. One three-semester-hour course in human biology: Biology 301L, 301M, 309D, or 311C
  - e. Second-semester-level proficiency, or the equivalent, in a single foreign language
  - f. A three-semester-hour course in economics
- 2. The applicant must have completed the following courses with a grade of at least *C* in each course: Social Work 310, 312, 313, 318, and 325. He or she must also have a University grade point average of at least 2.50 in courses that are part of the social work major requirements. Social Work 310 must be completed a semester before applying to the major.
- 3. The applicant must have a University grade point average of at least 2.00.
- 4. Application for admission must be made on forms available from the Office of Academic Affairs in the Steve Hicks School of Social Work.
- 5. The following must be submitted to the BSW Program by the application deadline:
  - a. The completed application for admission to the professional curriculum
  - b. A personal statement as explained on the application

- c. At least two recommendation forms completed by appropriate individuals who can attest to the applicant's academic and professional readiness to enter the program
- d. Documentation of successful completion of at least 45 hours of supervised service learning involving direct contact with clients in a human services organization
- e. Official transcripts from all colleges attended, if the coursework has not been transferred to the student's University record
- f. Score reports for any credit earned by examination, if the scores are not on the student's University record
- 6. The applicant may be asked to appear for a personal interview.

The applicant is considered on the basis of academic performance and their commitment to and suitability for generalist social work practice. The committee also assesses the applicant's emotional and professional readiness to work with clients on the basis of such factors as their work in courses already taken, previous meetings with social work advisers, personal statement, and the interview, if any, that is part of the application process. As a general guide, the committee also uses the *Student Standards for Social Work Education*, available at www.utexas.edu/ssw/current/forms/, which delineates expectations for social work students in four areas: basic abilities to acquire professional skills, mental and emotional abilities, professional performance skills, and scholastic performance. The *Standards* can be found in the appendix of the *BSW Handbook, available at* www.utexas.edu/ssw/current/forms/.

A student who is unable to attend in the semester for which he or she is admitted must reapply for admission in order to enroll at a later time. A student who has been admitted to and enrolls in the professional curriculum, withdraws, and then wishes to return must apply for readmission on the basis of the curriculum in effect at the time of the return. A student who has been out of the University for a semester or more must also submit an application for readmission to the University.

## Transfer Credit

As part of the application for admission to the University, students must submit transcripts from all other colleges and universities they have attended to the University's Office of Admissions. Students seeking readmission must submit transcripts from all schools they have attended since leaving the University. The Office of Admissions evaluates all transcripts and grants the student transfer credit when possible for coursework completed at the other schools.

Although the University's Office of Admissions may grant the student a certain number of semester hours of transfer credit for work completed in another social work program, the assistant dean for undergraduate programs in the Steve Hicks School of Social Work determines whether this coursework may be counted toward fulfillment of the Bachelor of Social Work degree requirements. Students who wish to use transfer credit to meet degree requirements should submit a course syllabus, assignments, and the titles and names of authors of textbooks to the assistant dean for undergraduate programs for evaluation.

Students may also seek transfer credit for coursework they complete at another institution after enrolling at the University. In this case the student should submit a transcript from the other institution to the University's Office of Admissions and a syllabus, course assignments, and information about textbooks to the Steve Hicks School of Social Work's assistant dean for undergraduate programs.

## Registration

*General Information* (http://catalog.utexas.edu/general-information/ registration-tuition-and-fees) provides information about registration, adding and dropping courses, transfer from one division of the University to another, and auditing a course. Published before registration each semester and summer session, the *Course Schedule* (https:// registrar.utexas.edu/schedules) includes registration instructions, advising locations, and the times, places, and instructors of classes. The *Course Schedule* and *General Information* are published on the Office of the Registrar's website (http://registrar.utexas.edu).

## Academic Policies and Procedures

### Honors

### **University Honors**

The designation University Honors, awarded at the end of each longsession semester, gives official recognition and commendation to students whose grades for the semester indicate distinguished academic accomplishment. Both the quality and the quantity of work done are considered. Criteria for University Honors are given in *General Information* (http://catalog.utexas.edu/general-information/academicpolicies-and-procedures/honors/#universityhonorstext).

### **Graduation with University Honors**

Students who, upon graduation, have demonstrated outstanding academic achievement are eligible to graduate with University Honors. Criteria for graduation with University Honors are given in *General Information* (http://catalog.utexas.edu/general-information/academicpolicies-and-procedures/honors/#graduationwithuniversityhonorstext).

## **Social Work Honors Program**

The Social Work Honors Program (http://socialwork.utexas.edu/bsw/ honors) is available to outstanding students who have distinguished themselves by superior academic performance during their time at the University.

Interested social work majors should apply for admission to the Honors Program Subcommittee of the BSW Curriculum Committee at least one full year before they expect to graduate. A University grade point average of at least 3.50 is required for admission, as is a grade point average of at least 3.50 in all of the coursework required for the major that the student has completed. The requirements for graduation from the Social Work Honors Program which are in addition to the requirements for the major, are: (1) a six-hour, two-semester honors tutorial course with a grade of at least *B*- for each semester; (2) an oral presentation of the student's honors thesis in a research colloquium open to the Steve Hicks School of Social Work community and the public; (3) a University grade point average of at least 3.50 and a grade point average of at least 3.50 in the courses required for the major and for the Social Work Honors Program; and (4) completion in residence at the University of at least 60 hours of coursework counted toward the degree.

## **Review and Grievance Procedures**

The Steve Hicks School of Social Work document *Student Standards for Social Work Education* delineates standards for professional education that apply to students enrolled in the Steve Hicks School of Social Work. Because of the nature of professional social work practice, the Steve Hicks School of Social Work has different expectations of students than do nonprofessional programs. All social work students are expected to abide by the *Standards* and by the National Association of Social Workers (NASW) Code of Ethics. When a student's performance does not meet expectations according to these established guidelines, a review may be called to bring the problem to the student's attention and to develop a plan to address the problem. Usually, the issue is resolved and the student is continued in the program with additional support provided to the student and/or conditions established for the student's continuance in the program. In some instances, depending on the nature of the problem, the student may be referred to the University's Office of the Dean of Students, counseled to change majors, or dismissed from the program.

Students enrolled in the social work program have the right to appeal decisions made by the social work program, including scholastic dismissal. Students are assured freedom from reprisals for filing appeals. Students who wish to appeal a decision made during a school review process should consult the *Standards* for information on grievance procedures, located in the BSW Handbook (http://www.utexas.edu/ssw/current/forms).

## Graduation

## **Special Requirements of the School**

All students must fulfill the General Requirements (p. 20) for graduation. Students in the Steve Hicks School of Social Work must also fulfill the following requirements.

- All University students must have a grade point average of at least 2.00 to graduate. In the Steve Hicks School of Social Work, students must also have a grade point average of at least 2.50 in required social work courses.
- 2. To receive an undergraduate degree from the University, every student must fulfill the following requirements on coursework taken in residence:
  - a. All University students must complete in residence at least 60 semester hours of coursework counted toward the degree. For the Bachelor of Social Work degree, these 60 hours must include at least 24 hours in the major and must include the required field practicum courses.
  - b. The University requires that at least six semester hours of advanced coursework in the major be completed in residence. The Steve Hicks School of Social Work further requires that 24 of the 46 hours of upper-division coursework for the Bachelor of Social Work be completed in residence.
- 3. An Air Force, Army, or Naval Reserve Officer Training Corps student who elects the basic and/or advanced program in air force science, military science, or naval science will not be approved for graduation until the government contract is completed, unless the student is released from the ROTC.

## Applying for Graduation

The Office of Academic Affairs provides each student with a computergenerated degree audit during each long-session semester. The degree audit notifies the student of the courses he or she must take and the requirements he or she must fulfill to receive the degree. The degree audit normally provides an accurate statement of requirements, but the student is responsible for knowing the exact requirements for the degree as stated in a catalog under which he or she is eligible to graduate and for registering so as to fulfill those requirements. The student should seek an official ruling in the Office of Academic Affairs before registering if in doubt about any requirement.

In the semester or summer session in which the degree is to be conferred, the candidate must be registered at the University and must apply for the degree in the Office of Academic Affairs. This should be done at the time of registration for the last semester, if possible, but in no event later than the deadline given in the official academic calendar. No degree will be conferred unless the graduation application form has been filed on time.

# Advanced Standing in Master's Degree Programs

A number of graduate schools of social work grant advanced standing to students who have completed all the requirements of an accredited undergraduate social work program. Many programs allow up to one year of credit toward the master's degree in social work. Information about programs offering advanced standing is available in the Office of Academic Affairs.

## **Degrees and Programs**

## **Applicability of Certain Courses**

No more than 36 semester hours in any one field of study other than social work may be counted toward the Bachelor of Social Work degree. No more than 60 semester hours of social work may be counted toward the degree.

## **Physical Activity Courses**

Physical activity courses (PED) are offered by the Department of Kinesiology and Health Education. Six semester hours of this coursework may be counted toward the Bachelor of Social Work degree. All physical activity courses are counted among courses for which the student is enrolled, and the grades are included in the grade point average.

## **ROTC Courses**

No more than six semester hours of credit for air force science, military science, or naval science courses may be counted toward the Bachelor of Social Work. Such credit may be used only as lower-division electives in degree programs that have room for such electives and only by students who have completed the third and fourth years of the ROTC program.

## **Correspondence and Extension Courses**

Credit that a University student in residence earns simultaneously by correspondence or extension from the University or elsewhere or in residence at another school will not be counted toward a degree in the Steve Hicks School of Social Work unless specifically approved in advance by the dean. No more than 30 percent of the semester hours required for the Bachelor of Social Work may be taken by correspondence. More information is available from the assistant dean for undergraduate programs.

## **Courses Taken on the Pass/Fail Basis**

Undergraduate students who have received at least 30 semester hours of college credit may take no more than five one-semester courses in elective subjects outside their major area on the pass/fail basis. Students must state their intention to register on this basis by the deadline given in the official academic calendar; they may not change the basis of registration in a course more than once; and they may not take more than two courses a semester on this basis.

## **Other Courses**

Music 101Q or Music 101V may not be counted toward any degree in the Steve Hicks School of Social Work. Other introductory courses, such as Music 201J, 201M, and 201N, may be counted toward degrees in the school.

No more than six semester hours of Bible courses may be counted toward the Bachelor of Social Work degree.

## **Bachelor of Social Work**

The requirements for the Bachelor of Social Work degree are designed to give the student an opportunity for integrated, nonrepetitive learning. A total of 122 semester hours is required. These may include credit by examination and a maximum of five one-semester elective courses taken on the pass/fail basis. All students must complete the requirements for the major and must complete at least 60 semester hours in residence at the University. These 60 hours must include at least 24 semester hours in social work. A completed degree program must include at least 46 semester hours of upper-division coursework, of which 24 semester hours must have been taken in residence. No more than 60 semester hours in social work may be counted toward the degree.

Each student must complete a sequence of prescribed work; major requirements, which include the field practicum; and special requirements, which include electives.

## **Prescribed Work**

The prescribed work provides the liberal arts base for the social work curriculum. Interdepartmental courses and credit by examination may be used to meet these requirements. Unless otherwise indicated, a course taken to meet the requirements of one area may not also be used to fulfill the requirements of another area; however, a single course may be used, unless otherwise indicated, to fulfill both an area requirement and a major requirement. No course used to fulfill area or major requirements, other than the field practicum, may be taken on the pass/fail basis.

## **Core Curriculum**

All students must complete the University's Core Curriculum (p. 23). A single course may not be counted toward more than one core area, but in some cases a course that is required for the Bachelor of Social Work may also be counted toward the core curriculum; these courses are identified below.

## **Skills and Experience Flags**

In the process of fulfilling the core curriculum and other degree requirements, all students pursuing the Bachelor of Social Work must complete courses that carry flags in the following areas:

- Writing: Three courses beyond Rhetoric and Writing 306 or the equivalent that carry a writing flag; one of these courses must be upper-division. Social Work 323K and 327 count toward this requirement; students must complete the third writing course outside the Steve Hicks School of Social Work. Courses used to fulfill the writing requirement may be used to fulfill other requirements.
- 2. Cultural diversity in the United States: One flagged course. Social Work 310 and 325 carry the cultural diversity flag.
- 3. Ethics: One flagged course. Social Work 332 and 333 carry the ethics flag.
- 4. Quantitative reasoning: One flagged course. Social Work 318 carries the quantitative reasoning flag.
- 5. Global cultures: One flagged course chosen from approved list. Social Work 360K (Ghana Maymester) and Social Work 460K (London Maymester) also satisfy the global cultures flag.
- 6. Independent inquiry: One flagged course. Social Work 323K carries the independent inquiry flag.

## Foreign Language

In addition to the core curriculum requirements above, undergraduates must earn credit for the second college-level course, or the equivalent,

in a foreign language. American Sign Language and Sign Language for Social Workers may be used to fulfill this requirement.

## **Major Requirements**

The Bachelor of Social Work program offers basic courses designed to provide students with concentrated and in-depth educational experience combining social work knowledge and practice skills. No course used to fulfill major requirements, except Social Work 640 and 641, may be taken on the pass/fail basis. Students are advised to complete the core curriculum, the skills and experiences flags, the foreign language requirement, and all lower-division major requirements before taking upper-division courses. In developing their degree plans, students must also pay careful attention to the sequencing of social work courses to ensure that prerequisite requirements are met.

Academic credit cannot be granted for life experience or previous work experience, and such experience cannot be substituted for any of the courses in the professional foundation areas or the field practicum. Students who believe they have the qualifications to receive credit by examination for a social work course other than the practice sequence coursework (Social Work 312, 332, 333, and 334) and the field practicum may submit a written request to the assistant dean for undergraduate programs. The assistant dean will review the request and determine whether or not the student should be permitted to take the examination.

- 1. The following courses are required:
  - a. Social welfare policy: Social Work 310, 323K.
  - b. Research: Social Work 313, 318.
  - c. Human behavior. Social Work 325, 327.
  - d. Practice: Social Work 312, 332, 333, 334.
  - e. Field practicum: Social Work 640, 641, 444.
- 2. Students must complete a three-semester-hour introductory course in psychology. Psychology 301 fulfills this requirement and may also be counted toward the social and behavioral science requirement of the core curriculum.
- Students must complete a three-semester-hour introductory course in sociology. Sociology 302 fulfills this requirement and may also be counted toward the social and behavioral science requirement of the core curriculum.
- 4. Students must complete a three-semester-hour course in human/ environmental biology: Biology 301L, 301M, 309D, 311C, or the equivalent. Biology 301L and 301M or Biology 311C and 301M may be used together to complete the science and technology part I requirement. If biology coursework is not used for science and technology part I, any of these courses may be used to fulfill the science and technology part II requirement.
- Students must complete three semester hours in economics. Certain economics courses may also be used to fulfill the social and behavioral sciences requirement of the core curriculum.
- 6. Students must complete three semester hours in child psychology or child development. Psychology 304 or Human Development and Family Sciences 313 accompanied with HDF 113L may be used to fulfill this requirement.
- 7. Students must complete at least nine semester hours of upperdivision coursework in the social and behavioral sciences (applied learning and development, anthropology, economics, educational psychology, government, history, kinesiology, psychology, sociology, Social Work 360K topics) in addition to other major requirements. Six of these nine hours may be upper-division social work electives.

## **Field Sequence Requirements**

The social work program requires that students complete 45 clock hours of supervised service learning related to social work to be admitted

to the major, to upper-division courses in social work, and to the field practicum. These service learning hours may be used to meet course requirements in Social Work 310 and 312. Students must also complete 480 clock hours of fieldwork as part of the course requirements in Social Work 640 and 641. Students have the opportunity in the field practicum to develop the professional skills needed for entry-level social work positions as generalist practitioners. Adequate laboratory time through the field practicum is built into this professional program to provide students with an opportunity to test their developing skills in a real-life environment. At the same time, faculty members evaluate the student's professional development within the context of the educational objectives established for the experience. The goals are for the student to learn real-life practice, to develop skills, to relate concepts to skill development, to remain motivated to continue to learn, and to evaluate personal performance.

To enroll in the field practicum, students must meet the following requirements: (1) admission to the major in social work; (2) a University grade point average of at least 2.00; and (3) both a grade point average of at least 2.50 for the following group of courses and a grade of at least C in each course in the group: Social Work 310, 312, 313, 318, 323K, 325, 327, 332, 333, and 334.

Following the student's admission to the field practicum, his or her work is reviewed periodically by the student, the field faculty, and the agency supervisor. Should the student have trouble meeting the professional or academic requirements of the program, the review process will bring the difficulty to the student's attention and assist the student in seeking appropriate resolution. The student may make use of counseling and advising services at any time. If difficulties cannot be resolved, the field director may conduct an administrative review, which may result in a decision to terminate the student's field placement. The student is notified of this decision in writing.

All social work students enrolling in the field practicum are required to show evidence of professional liability insurance coverage paid for the duration of the course. The effective date of the policy must be on or before the first regular class period of the field practicum course for which the student is enrolling. Failure to provide evidence of insurance may result in the student being dropped from the field practicum.

### Special Requirements Elective Requirements and Limitations

In addition to the area and major requirements given above, the student must take elective coursework to complete the 122 semester hours required for the Bachelor of Social Work. No more than five one-semester courses taken on the pass/fail basis, 36 hours in any one field of study other than social work, and 54 hours in social work may be counted toward the 122-hour requirement.

#### **Minimum Scholastic Requirements**

- 1. The student must fulfill the University-wide graduation (p. 20) requirements and the requirements of the Steve Hicks School of Social Work given earlier in this section.
- 2. To apply for admission to the social work major, a student must have earned a grade of at least *C* in each of the following courses: Social Work 310, 312, 313, 318 and 325. The student must also have a University grade point average of at least 2.00 and a grade point average of at least 2.50 in all the courses he or she has completed that are part of the social work major requirements. Additional requirements are given in the section Admission to the Major in Social Work (p. 784).
- 3. Following the student's admission to the major, the student's coursework is reviewed periodically by the student and the academic

adviser. Students must maintain a University grade point average of at least 2.00; they must also earn a grade of at least *C* in each course listed as a social work major requirement and must maintain a grade point average of at least 2.50 in these courses. If the student has trouble meeting the professional or academic requirements of the major, the review process delineated in *Student Standards for Social Work Education*, available at www.utexas.edu/ssw/current/ forms/, will bring the difficulty to the student's attention and assist the student in making appropriate resolution. The student may make use of counseling and advising services at any time.

- 4. If the student's grade point average in social work courses falls below 2.50, the student is placed on academic probation in social work. If the grade point average remains below 2.50 for two consecutive semesters, including the summer session, the student is subject to academic dismissal from the Steve Hicks School of Social Work.
- All students who seek to reenter the Steve Hicks School of Social Work after having been placed on enforced withdrawal or academic dismissal must have the approval of the assistant dean for undergraduate programs.
- 6. Any student who has a grade of *C* or higher in a course may not repeat the course and use the second grade to improve his or her grade point average without special permission of the assistant dean for undergraduate programs. If a student repeats a course, all grades received for the course are included in the grade point average.

## Order and Choice of Work

A pre-social work major may fulfill the requirements for application to the major in four or five long-session semesters, depending on the number of hours completed each semester. After admission to the major, students complete a three-semester professional sequence and additional requirements needed for the BSW degree.

Suggested Schedule for Pre-Social Work Majors

First Year		
First Term	Hours Second Term	Hours
RHE 306	3 A course to be counted towards the mathematics requirement of the core curriculum	3
S W 310	3 A course to be counted toward the U.S. history requirement of the core curriculum	3
PSY 301	3 A biology course to be counted toward the natural science and technology part I or II requirement of the core curriculum	3
SOC 302	3 GOV 310L	3
UGS 302 or 303	3 A three-hour course to be counted toward the visual and performing arts requirement of the core curriculum	3
	15	15
Second Year	15	15
Second Year First Term	15 Hours Second Term	15 Hours
First Term	Hours Second Term	Hours
<b>First Term</b> E 316L, 316M, 316N, or 316P	Hours Second Term 3 S W 313	Hours 3
<b>First Term</b> E 316L, 316M, 316N, or 316P GOV 312L	Hours Second Term 3 S W 313 3 S W 318 3 A course to be counted toward the U.S. history requirement of the core	Hours 3 3
First Term E 316L, 316M, 316N, or 316P GOV 312L S W 312 Foreign language 601D, or an equivalent beginning course; or Sign	Hours Second Term 3 S W 313 3 S W 318 3 A course to be counted toward the U.S. history requirement of the core curriculum 3-6 Foreign language 610D, or an equivalent second sequence course;	Hours 3 3 3

#### Third Year

Hours Second Term	Hours
3 A three-hour upper-division elective, if needed, to provide the required forty- six hours of upper-division credit	3
3 S W 327	3
3 S W 334	3
3 A course that carries a global cultures flag	3
3 Three hours of upper-division social and behavioral science coursework	3
15	15
Hours Second Term	Hours
3 S W 640	6
3 S W 641	6
3 S W 444	4
3	
3	
15	16
	3 A three-hour upper-division elective, if needed, to provide the required forty- six hours of upper-division credit 3 S W 327 3 S W 334 3 A course that carries a global cultures flag 3 Three hours of upper-division social and behavioral science coursework 15 Hours Second Term 3 S W 640 3 S W 641 3 S W 444 3 3

Total credit hours: 121-127

The student must also complete all other remaining required coursework before the field practicum, including electives needed to provide the total of 122 semester hours required for the degree. No other courses may be taken concurrently with the field practicum courses.

## Minor and Certificate Programs

### Minor

The transcript-recognized undergraduate academic minor must be completed in conjunction with an undergraduate degree at The University of Texas at Austin. For more information regarding the requirements for achieving a minor, including a comprehensive list of minors, please visit the Minors and Certificate Programs (p. 13) section of the Undergraduate Catalog.

### Social Work Minor

A Social Work Minor requires completion of 15 semester hours, six of which must be upper-division. All courses in the Social Work minor must be taken on a letter grade basis and students must earn a minimum grade of a C.

All interested students must apply for admission to the minor. To be eligible, students must satisfy the following requirements:

Requirements		Hours	
S W 310	Introduction to Social Work and Social Welfare <sup>1</sup>		3
Submission of a persona Work Minor	al statement of interest in the Social		
Minimum The University of Texas at Austin GPA of 2.5			
1 With a minimum grade	e of a "C"		

Nith a minimum grade of a "C

#### **Required Courses**

Requirements		Hours	
S W 310	Introduction to Social Work and Social Welfare		3
S W 312	Generalist Social Work Practice: Knowledge, Values, and Skills		3

S W 325	Foundations of Social Justice	3
Students will choos	se 2 additional courses from SW 360K	6
numbered topic co	urses to complete their required 15	
semester hours.		

### **Disability Studies Minor**

A program that focuses on the nature, meaning, and consequences of what it is to be defined as disabled and explores the historical, cultural, economic, physiological, and socio-political dynamics of disability. Includes instruction in disability rights, legal issues, and public policy; literature, philosophy, and the arts; and/or research in the social sciences, education, and health sciences addressing social and experiential aspects of disability.

All interested students must apply for admission to the minor. To be eligible, students must 1) submit a personal statement of interest in the Disability Studies Minor, and 2) have an overall minimum The University of Texas at Austin GPA of 2.5.

The Disability Studies Minor requirements are:

Requirements		Hours	
S W 325	Foundations of Social Justice		3
S W 360K	Current Social Work Topics (Topic: The Social Context of Disability)		3
S W 360K	Current Social Work Topics (Topic: Making Systems Work for People with Disabilities)		3
Six hours chosen from:			6
ALD 322	Individual Differences		
ANT 302	Cultural Anthropology		
ANT 349C	Human Variation		
CSD 306K	Introduction to Communication Disorders		
CSD 308K	Perspectives on Deafness		
E 376M	Studies in Ethnic American Literature		
EDP 376T	Topics in Educational Psychology		
N 347	Specialized Topics in Nursing		
SED 303	Autism Spectrum Disorder. Truths and Consequences		
S W 311	Introductory Topics in Social Work (Topic 1: Sign Language for Social Workers I)		
KIN 352K	Studies in Human Movement: Topical Studies		
KIN 360	Programming for People with Disabilities		
S W 360K	Current Social Work Topics		
Please Note:			

Please Note:

All courses in the disability studies minor must be taken on a letter grade basis, and students must earn a minimum grade of a C.

## Certificates

### Certificate in Public Safety for Bachelor of Social Work Students

The certificate in public safety provides undergraduate social work students with coursework and service learning opportunities that prepare them for careers in public safety. These careers may include work in

such settings as law enforcement, fire departments, Emergency Medical Services (EMS), and emergency management at the local, state, and national levels.

#### Requirements:

The certificate will be awarded to students whose successful completion of the BSW program of work includes six courses (18 hours) in the area of focus, including:

	Requirements		Hours	
	PSF 311	Social Work and Public Safety		3
	S W 325	Foundations of Social Justice		3
	Three courses chosen fro	om the following:		9
	S W 311	Introductory Topics in Social Work (Topic: Introduction to the Criminal Justice System)		
	S W 360K	Current Social Work Topics (Topic 3: Treatment of Substance Use Disorders)		
	S W 360K	Current Social Work Topics (Topic 4: Social Work Practice with Abused and Neglected Children and their Families)		
	S W 360K	Current Social Work Topics (Topic 5: Advanced Topics in Social and Economic Justice)		
	S W 360K	Current Social Work Topics (Topic 6: Contemporary Issues in Domestic Violence)		
	S W 360K	Current Social Work Topics (Topic 8: Leadership in the Community)		
	S W 360K	Current Social Work Topics (Topic 9: Loss and Grief: Individual, Family, and Cultural Perspectives)		
	S W 360K	Current Social Work Topics (Topic 11: Communication Skills in Interdisciplinary Settings)		
	S W 360K	Current Social Work Topics (Topic 12: Social Work in the Legal System)		
	S W 360K	Current Social Work Topics (Topic 14: Working with Youth Gangs)		
	S W 360K	Current Social Work Topics (Topic 15: Youth, Delinquency, and Juvenile Justice)		
	S W 360K	Current Social Work Topics (Topic 17: Principles of Recovery and Relapse Prevention)		
	S W 360K	Current Social Work Topics (Topic 18: Mental Health Issues in Public Safety)		
	PSF 360K	Public Safety Field Immersion <sup>1</sup>		3

1. Field Immersion Placements: Placements will be completed in public safety related settings, including such possibilities as the Austin Police Department, The University of Texas at Austin Police Department, Travis County Sheriff's Office, the Department of Corrections, City of Austin Office of Emergency Management, Travis County Office of Emergency Management, and Austin EMS. Application Process:

Students will complete an application form and submit it to the Undergraduate Program Coordinator, who, in consultation with the Senior Associate Dean for Academic Affairs, will offer admission to the Certificate Program.

## Courses

The faculty has approval to offer the following courses in the academic years 2018–2019 and 2019–2020; however, not all courses are taught each semester or summer session. Students should consult the *Course Schedule* (http://registrar.utexas.edu/schedules) to determine which courses and topics will be offered during a particular semester or summer session. The Course Schedule (https://registrar.utexas.edu/ schedules) may also reflect changes made to the course inventory after the publication of this catalog.

A full explanation of course numbers is given in *General Information* (http://catalog.utexas.edu/general-information/academic-policies-and-procedures/credit-value-and-course-numbers). In brief, the first digit of a course number indicates the semester hour value of the course. The second and third digits indicate the rank of the course: if they are 01 through 19, the course is of lower-division rank; if 20 through 79, of upper-division rank; if 80 through 99, of graduate rank.

The information in parentheses after a course number is the Texas Common Course Numbering (TCCN) designation. Only TCCN designations that are exact semester-hour equivalents of University courses are listed here. Additional TCCN information is given in Appendix A (p. 793).

## Public Safety: PSF

#### **Lower-Division Courses**

#### PSF 311. Social Work and Public Safety.

Restricted to social work majors and pre-majors. Focuses on the intersection between social work, public safety, law, and human services. Three lecture hours a week for one semester. Offered on the letter-grade basis only.

### **Upper-Division Courses**

#### PSF 360K. Public Safety Field Immersion.

Restricted to social work majors and pre-majors. Explores the intersection of social work and public safety. Experiential learning in approved public safety-related settings and a weekly one-hour seminar. One lecture hour a week and completion of 120 hours of service learning for one semester. Offered on the pass/fail basis only.

### Social Work: S W

#### **Lower-Division Courses**

## S W 310 (TCCN: SOCW 2361). Introduction to Social Work and Social Welfare.

Introduction to the profession of social work and its roles in the social welfare system, with emphasis on social problems, society's historical response, and contemporary proposed solutions. Three lecture hours a week for one semester, and forty-five clock hours of service learning.

#### S W 311. Introductory Topics in Social Work.

Selected introductory topics in the social work profession. Three lecture hours a week for one semester. May be repeated for credit when the topics vary.

Topic 1: Sign Language for Social Workers I. Restricted to social work pre-majors and majors. Social Work 311 (Topic: Sign Language for Social Workers I) and 311 (Topic 1) may not both be counted. May be counted towards the foreign language requirement for social work. Topic 2: Sign Language for Social Workers II. Restricted to social work pre-majors and majors. Social Work 311 (Topic: Sign Language for Social Workers II) and 311 (Topic 2) may not both be counted. May be counted towards foreign language requirement for social work. Additional prerequisite: Social Work 311 (Topic 1).

**Topic 3: Introduction to the Criminal Justice System.** Social Work 311 (Topic: Criminal Justice System) and 311 (Topic 3) may not both be counted.

## S W 312. Generalist Social Work Practice: Knowledge, Values, and Skills.

Restricted to social work pre-majors. Introduction to generalist social work practice, with emphasis on the knowledge, values, and skills used in intervention. Three lecture hours a week for one semester, and forty-five clock hours of service learning. Prerequisite: Credit or registration for Social Work 310.

#### S W 313. Social Work Research Methods.

Introduction to the logic, design, and use of research, with emphasis on research designs appropriate to social work. Three lecture hours a week for one semester. Prerequisite: Credit or registration for Social Work 318 or the equivalent.

#### S W 318. Social Work Statistics.

Introduction to statistics commonly used in social work research, including the critical analysis of the findings and inferential processes of existing research studies. Three lecture hours a week for one semester. Prerequisite: Completion of the Area C mathematics requirement for the Bachelor of Social Work.

#### **Upper-Division Courses**

#### S W 323K. Social Welfare Programs, Policies, and Issues.

Restricted to social work majors. Study of structure and function of service delivery systems, policy analysis, and effects and influences of policy on practice and planning decisions. Three lecture hours a week for one semester. Prerequisite: Government 310L, 312L, History 315K, 315L, and three semester hours of coursework in Economics are recommended.

#### S W 325. Foundations of Social Justice.

History and demographics of culturally diverse groups in the United States, including family and community diversity. Emphasis on principles of knowledge acquisition about cultural diversity and ethnic-sensitive social work practice. Three lecture hours a week for one semester. Prerequisite: Social Work 310.

#### S W 327. Human Behavior and Social Environment.

Same as Urban Studies 354 (Topic 10). Survey of selected theories of human behavior, including a systems/ecological perspective, ego psychology, and social learning theory, with emphasis on the life cycle from adolescence through adulthood. Three lecture hours and one laboratory hour a week for one semester. Only one of the following may be counted: Social Work 327, Urban Studies 354 (Topic: Human Behavior and Social Environment), 354 (Topic 10). Prerequisite: For social work majors, admission to the major in social work; for others, upper-division standing.

#### S W 332. Social Work Practice with Individuals and Families.

Restricted to social work majors. Theory and knowledge of effecting change in individuals and families, with emphasis on analytical and interactional processes and skills. Three lecture hours a week for one

semester. Prerequisite: Social Work 325 and 327 with a grade of at least C in each.

#### S W 333. Social Work Practice with Groups.

Restricted to social work majors. Theory and knowledge of group dynamics, group development, and effective group work skills. Three lecture hours a week for one semester. Prerequisite: Social Work 325 and 327 with a grade of at least C in each.

## S W 334. Social Work Practice in Organizations and Communities.

Restricted to social work majors. Theory and knowledge of effecting change in organizations and communities, with an emphasis on analytical and interactional processes and skills. Three lecture hours a week for one semester.

#### S W 640. Social Work Practicum I.

Field practicum providing supervised experience in which students apply knowledge and develop skills of social work practice. Educational supervision by faculty and by social workers in community agencies. Sixteen laboratory hours a week for one semester. Offered on the pass/fail basis only. Prerequisite: Admission to the field sequence and concurrent enrollment in Social Work 641 and 444.

#### S W 641. Social Work Practicum II.

Knowledge and skill in social work, building on objectives emphasized in Social Work 640. Educational supervision by faculty and by social workers in community agencies. Sixteen laboratory hours a week for one semester. Offered on the pass/fail basis only. Prerequisite: Admission to the field sequence and concurrent enrollment in Social Work 640 and 444.

#### S W 444. Integrative Seminar.

Integration of theory and practice on the basis of field practicum experiences. Four lecture hours a week for one semester. Prerequisite: Completion of all requirements for the Bachelor of Social Work degree except Social Work 640 and 641, and concurrent enrollment in Social Work 640 and 641.

#### S W 350. Special Topics in Generalist Social Work.

Conference course. May be repeated for credit. Prerequisite: Upperdivision standing.

#### S W 360K, 460K. Current Social Work Topics.

Designed to enable each student to undertake intensive study of selected aspects of social work practice. Three or four lecture hours a week for one semester. May be repeated for credit when the topics vary. Prerequisite: Varies with the topic.

**Topic 2: African American Family.** Same as African and African Diaspora Studies 321K and Women's and Gender Studies 340 (Topic 3). Overview of historical and contemporary issues facing African American families and children. Social service delivery to African American families and communities is emphasized. Three lecture hours a week for one semester. Only one of the following may be counted: African and African Diaspora Studies 321K, 374 (Topic 1), Social Work 360K (Topic 2), Women's and Gender Studies 340 (Topic 3).

Topic 3: Treatment of Substance Use Disorders.

Topic 4: Social Work Practice with Abused and Neglected Children and Their Families. Social Work 360K (Topic: Social Work Practice with Abused and Neglected Children and Their Families) and 360K, 460K (Topic 4) may not both be counted.

Topic 5: Advanced Topics in Social and Economic Justice.

**Topic 6: Contemporary Issues in Domestic Violence.** Social Work 360K (Topic: Contemporary Issues in Domestic Violence) and 360K, 460K (Topic 6) may not both be counted.

**Topic 7: International Social Work.** Social Work 360K (Topic: International Social Work) and 360K, 460K (Topic 7) may not both be counted.

**Topic 8: Leadership in the Community.** Must have consent of instructor to register. Social Work 360K (Topic: Leadership in the Community) and 360K, 460K (Topic 8) may not both be counted.

Topic 9: Loss and Grief: Individual, Family, and Cultural Perspectives. Social Work 360K (Topic: Loss and Grief: Individual, Family, and Cultural Perspectives) and 360K, 460K (Topic 9) may not both be counted.

**Topic 10: Methods of Play Intervention.** Social Work 360K (Topic: Methods of Play Intervention) and 360K, 460K (Topic 10) may not both be counted.

Topic 11: Communication Skills in Interdisciplinary Settings.

**Topic 12: Social Work in the Legal System.** Social Work 360K (Topic: Social Workers in the Legal System) and 360K, 460K (Topic 12) may not both be counted.

**Topic 13: Social Work in the School Setting.** Social Work 360K (Topic: Social Work in the School Setting) and 360K, 460K (Topic 13) may not both be counted.

**Topic 14: Working with Youth Gangs.** Social Work 360K (Topic: Working with Youth Gangs) and 360K, 460K (Topic 14) may not both be counted.

**Topic 15: Youth, Delinquency, and Juvenile Justice.** Social Work 360K (Topic: Youth, Delinquency, and Juvenile Justices) and 360K, 460K (Topic 15) may not both be counted.

Topic 16: Roots of Social and Economic Justice: An International Perspective. Course is offered as a Maymester in London through Study Abroad Office. Social Work 360K (Topic: Roots of Social and Economic Justice: An International Perspective) and 360K, 460K (Topic 16) may not both be counted.

Topic 17: Principles of Recovery and Relapse Prevention.

**Topic 18: Mental Health Issues in Public Safety.** Designed to provide a basic understanding of mental health intervention and treatment related issues for students planning to work in the field of public safety.

#### S W 679H. Honors Tutorial Course.

Individual conference course in social work research and writing. The equivalent of three lecture hours a week for two semesters. Prerequisite: Upper-division standing and admission to the Social Work Honors Program.

# Appendix A: Texas Common Course Numbering System

To help students transfer credit from one institution to another, Texas community colleges employ a statewide numbering system for their courses. The Texas Common Course Numbering system (TCCN) is a standard set of four-character abbreviations for academic disciplines and four-digit course numbers. The first digit of the number represents the academic level of the course (0 for subfreshman, 1 for freshman, and 2 for sophomore); the second represents the semester credit hour value of the course. Texas public universities, and some private ones, cross-reference their courses with TCCN.

Listed below are TCCN course designations and their University transfer credit evaluations. In the University's three-digit numbering system, the first digit indicates the semester credit hour value of the course. The suffixes *A* and *B* indicate the first and second parts of a course; credit for each part is half the value indicated by the first digit.

Notes are given below the table.

		51
TCCN Designation	The University of Texas at Austin Transfer Credit	BI
ACCT 2301	ACC 311	BI
ACCT 2302	ACC 312	
ACCT 2401	ACC 412 <sup>1</sup>	BI
ACCT 2402	ACC 412 <sup>1</sup>	BI
ANTH 2301	ANT 301	BI
ANTH 2302	ANT 304	
ANTH 2351	ANT 302	BI
ANTH 2401	ANT 401 <sup>1</sup>	
ARAB 1411	ARA 406 <sup>3</sup>	CH
ARAB 1412	ARA 407 <sup>3</sup>	CH
ARAB 2311	ARA 312K <sup>3</sup>	CH
ARAB 2312	ARA 312L <sup>3</sup>	CH
ARCH 1301	ARC 318K	CH
ARCH 1302	ARC 318L	CH
ARCH 1311	ARC 308 <sup>6</sup>	CH
ARTS 1301	ARH 301	CH
ARTS 1303	ARH 302	CH
ARTS 1304	ARH 303	CH
ARTS 1311	ART 301C	CH
ARTS 1312	ART 303C	CH
ARTS 1316	ART 302C	CH
ARTS 1317	ART 315K	CH
ARTS 2316	ART 311K	CH
ARTS 2323	ART 316K	CH
ARTS 2326	ART 313K	CC
ARTS 2341	ART 314K <sup>4</sup>	CC
ARTS 2346	ART 310K <sup>4</sup>	CC
ARTS 2356	ART 317K	CC
ASTR 1103	AST 103L	DA
ASTR 1104	AST 1 LAB	DA
ASTR 1303	AST 301	DA
ASTR 1304	AST 309S	DA

ACTD 1402	AST 301+AST 103L
ASTR 1403 ASTR 1404	AST 301+AST TOSE AST 309S+1 LAB
BCIS 1305	MIS 310
BCIS 1305 BCIS 1405	MIS 310 MIS 410 <sup>1</sup>
	BIO 206LA <sup>2</sup>
BIOL 1106	BIO 206LB <sup>2</sup>
BIOL 1107	BIO 311C <sup>2</sup>
BIOL 1306	BIO 311D <sup>2</sup>
BIOL 1307	BIO 301L <sup>2</sup>
BIOL 1308	BIO 301L BIO 301M <sup>2</sup>
BIOL 1309	
BIOL 1322	NTR 306 BIO 311C+BIO 206LA <sup>2</sup>
BIOL 1406	BIO 311C+BIO 206LB <sup>2</sup>
BIOL 1407	BIO 301L+1 LAB <sup>2</sup>
BIOL 1408	BIO 301D+1 LAB <sup>2</sup>
BIOL 1409	BIO 301M+1 LAB
BIOL 2120	MIC 116L <sup>4</sup>
	BIO 1 LAB <sup>2</sup>
BIOL 2121	
	MIC 119K <sup>4</sup>
BIOL 2301+2101	BIO 416K <sup>4</sup>
BIOL 2302+2102	BIO 416L <sup>4</sup>
BIOL 2320	BIO 3 SOPH <sup>2</sup>
	MIC 316 <sup>1,4</sup>
BIOL 2321	BIO 3 SOPH <sup>2</sup>
	MIC 319 <sup>4</sup>
BIOL 2401	BIO 416K <sup>4</sup>
BIOL 2402	BIO 416L <sup>4</sup>
BIOL 2420	BIO 3 Soph+1 Lab
	MIC 316 <sup>1,4</sup> +116L <sup>4</sup>
BIOL 2421	BIO 3 Soph+1 Lab
	MIC 319 <sup>4</sup> +119K <sup>4</sup>
CHEM 1111	CH 104M
CHEM 1112	CH 104N
CHEM 1311	CH 301
CHEM 1312	CH 302
CHEM 1411	CH 301+CH 104M
CHEM 1412	CH 302+CH 104N
CHEM 2123	CH 110K <sup>4</sup>
CHEM 2125	CH 110L <sup>4</sup>
CHEM 2323	CH 310M <sup>4</sup>
CHEM 2325	CH 310N <sup>4</sup>
CHEM 2423	CH 310M <sup>4</sup> +CH 110K <sup>4</sup>
CHEM 2425	CH 310N <sup>4</sup> +CH 110L <sup>4</sup>
CHIN 1411	CHI 406 <sup>3</sup>
CHIN 1412	CHI 407 <sup>3</sup>
CHIN 2311	CHI 312K <sup>3</sup>
CHIN 2312	CHI 312L <sup>3</sup>
COMM 1307	RTF 305
COMM 1316	COM 316
COMM 1335	RTF 316 <sup>4</sup>
COMM 2366	RTF 306
DANC 1241	T D 212F <sup>3</sup>
DANC 1245	T D 212C <sup>3</sup>
DANC 2241	T D 212G <sup>3</sup>
DANC 2245	T D 212D <sup>3</sup>

	2		
DRAM 1120	T D 114P <sup>3</sup>	GEOL 1304 + 1104	GEO 405
DRAM 1121	T D 114P <sup>3</sup>	GEOL 1345	MNS 307
DRAM 1310	T D 301	GEOL 1347	GRG 301K
DRAM 1330	T D 314C	GEOL 1401	GEO 302K + 1 Lab
DRAM 1351	T D 313C	GEOL 1402	GEO 302K + 1 Lab
DRAM 1352	T D 313D	GEOL 1403	GEO 401
DRAM 2120	T D 114P <sup>3</sup>	GEOL 1404	GEO 405
DRAM 2121	T D 114P <sup>3</sup>	GEOL 1445	MNS 307+1 Lab
DRAM 2331	T D 314M	GEOL 1447	GRG 401K <sup>1</sup>
DRAM 2336	T D 303C	GERM 1411	GER 406 <sup>3</sup>
DRAM 2351	T D 313E	GERM 1412	GER 407 <sup>3</sup>
DRAM 2361	T D 317C	GERM 2311	GER 312K
DRAM 2362	T D 317D	GERM 2312	GER 312L
DRAM 2366	RTF 306	GOVT 2305	GOV 3 US <sup>5</sup>
ECON 2301	ECO 304L	GOVT 2306	GOV 3 TX <sup>5</sup>
ECON 2302	ECO 304K	HECO 1322	NTR 306
EDUC 1100	EDP 104 <sup>3</sup>	HIST 1301	HIS 315K
EDUC 1200	EDP 204 <sup>3</sup>	HIST 1302	HIS 315L
EDUC 1300	EDP 304	HIST 2311	HIS 309K
ENGL 1301	RHE 306	HIST 2312	HIS 309L
ENGL 1302	RHE 309K	HIST 2321	HIS 301F
ENGL 2311	RHE 317 <sup>4</sup>	HIST 2322	HIS 301J
ENGL 2321			
	E 316L	HIST 2327	HIS 317L
ENGL 2322	E 316L	HIST 2328	HIS 314K
ENGL 2323	E 316L	HIST 2381	HIS 317L
ENGL 2326	E 316M	HUMA 1315	F A 310
ENGL 2327	E 316M	ITAL 1411	ITL 406 <sup>3,4</sup>
ENGL 2328	E 316M	ITAL 1412	ITL 407 <sup>3,4</sup>
ENGL 2331	E 316N	ITAL 2311	ITL 312K
ENGL 2332	E 316N	ITAL 2312	ITL 312L
ENGL 2333	E 316N	JAPN 1411	JPN 406 <sup>3</sup>
ENGL 2341	E 314L	JAPN 1412	JPN 407 <sup>3</sup>
ENGL 2342	E 314L	JAPN 2311	JPN 312K <sup>3</sup>
ENGL 2343	E 314L	JAPN 2312	JPN 312L <sup>3</sup>
ENGL 2351	E 314V (Topic 3)	KINE 1306	KIN 313 (Topic 1) <sup>1</sup>
ENGR 1204	M E 210	KINE 1308	KIN 319K1
ENGR 1304	M E 310 <sup>1</sup>	KINE 1321	KIN 319K <sup>1</sup>
ENGR 2301	E M 306	KINE 1331	KIN 314
ENGR 2302	E M 311M	KINE 2356	KIN 312 (Topic 2)
ENGR 2303	E M 306S <sup>4</sup>	KORE 1411	KOR 406 <sup>3</sup>
ENGR 2305	E E 302	KORE 1412	KOR 407 <sup>3</sup>
ENGR 2332	E M 319	KORE 2311	KOR 312K <sup>3</sup>
ENGR 2401	E M 406 <sup>1</sup>	KORE 2312	KOR 312L <sup>3</sup>
ENGR 2402	E M 411M <sup>1</sup>	LATI 1411	LAT 406 <sup>3</sup>
ENGR 2403	E M 406S <sup>1,4</sup>	LATI 1412	LAT 407 <sup>3</sup>
ENGR 2405	E E 402	LATI 2311	LAT 311
FREN 1411	FR 406	LATI 2312	LAT 312K
FREN 1412	FR 407	MATH 1314	M 301
FREN 2311	FR 312K	MATH 1316	M 304E <sup>4</sup>
FREN 2312	FR 312L	MATH 1324	M 303D
GEOG 1301	GRG 301C	MATH 1325	М 303К <sup>3</sup>
GEOG 1302	GRG 305	MATH 1332	M 302
GEOL 1301	GEO 302K	MATH 1342	SDS 301
GEOL 1302	GEO 302K	MATH 1350	M 316K
GEOL 1303 + 1103	GEO 401	MATH 1351	M 316L

MATH 1414	M 401 <sup>1</sup>	PHIL 2307	PHL 318K
MATH 1442	SDS 401 <sup>1</sup>	PHIL 2316	PHL 301K
MATH 2312	M 305G	PHIL 2321	PHL 305
MATH 2313	M 308K <sup>3</sup> or M 308N <sup>3</sup>	PHYS 1101	PHY 102M
MATH 2314	M 308L <sup>3</sup> or M 308S <sup>3</sup>	PHYS 1102	PHY 102N
MATH 2315	M 308M <sup>3</sup>	PHYS 1103	AST 103L
MATH 2318	M 311 <sup>4</sup>	PHYS 1104	AST 1 LAB
MATH 2320	M 327K <sup>3,4</sup>	PHYS 1105	PHY 1 LAB
MATH 2321	M 327J <sup>3</sup>	PHYS 1107	PHY 1 LAB
MATH 2412	M 405G <sup>1</sup>	PHYS 1301	PHY 302K
MATH 2413	M 408K or M 408N	PHYS 1302	PHY 302L
MATH 2414	M 408L or M 408S	PHYS 1303	AST 301
MATH 2415	M 408M	PHYS 1304	AST 309S
MATH 2418	M 411 <sup>1,4</sup>	PHYS 1305	РНҮ 309К
MATH 2420	M 427K <sup>4</sup>	PHYS 1307	PHY 309L
MATH 2421	M 427J	PHYS 1401	PHY 302K+PHY 102M
MUAP	Applied music performance	PHYS 1402	PHY 302L+PHY 102N
	courses transfer as generic	PHYS 1403	AST 301+AST 103L
	semester hour credit in an	PHYS 1404	AST 309S+1 LAB
	appropriate instrument. Degree and prerequisite applicability for music	PHYS 1405	PHY 309K+1 LAB
	majors is determined by the Butler	PHYS 1407	PHY 309L+1 LAB
	School of Music.	PHYS 2125	PHY 103M
MUEN	Music ensemble courses transfer	PHYS 2126	PHY 103N
	with appropriate University	PHYS 2325	РНҮ 303К
	course numbers where applicable,	PHYS 2326	PHY 303L
	otherwise as generic semester hour	PHYS 2425	PHY 303K+PHY 103M
MUSI 1181	credit in ensemble (ENS). MUS 101M <sup>3</sup>	PHYS 2426	PHY 303L+PHY 103N
MUSI 1181 MUSI 1182	MUS 101N <sup>3</sup>	PORT 1411	POR 406
	MUS 405A <sup>3</sup>	PORT 1412	POR 407
MUSI 1211	MUS 405B <sup>3</sup>	PORT 2311	POR 312K
MUSI 1212 MUSI 1303	MUS 306M	PORT 2312	POR 312L
	MUS 313 <sup>4</sup>	PSYC 1100	EDP 104 <sup>3</sup>
MUSI 1304	MUS 302L	PSYC 1200	EDP 204 <sup>3</sup>
MUSI 1306		PSYC 1300	EDP 304
MUSI 1310	MUS 307	PSYC 2301	PSY 301
MUSI 1311	MUS 605A MUS 605B	PSYC 2306	PSY 306
MUSI 1312	MUS 211A <sup>3</sup>	PSYC 2308	PSY 304
MUSI 2116	MUS 211B <sup>3</sup>	PSYC 2316	PSY 309
MUSI 2117	MUS 110J <sup>3</sup>	PSYC 2317	PSY 317
MUSI 2181	MUS 110K <sup>3</sup>	PSYC 2319	PSY 319K
MUSI 2182	MUS 412A <sup>3</sup>	RUSS 1411	RUS 406 <sup>3</sup>
MUSI 2211	MUS 412B <sup>3</sup>	RUSS 1412	RUS 407 <sup>3</sup>
MUSI 2212		RUSS 2311	RUS 312K
MUSI 2216	MUS 411A	RUSS 2312	RUS 312L
MUSI 2217	MUS 411B	SGNL 1301	ASL 306 <sup>3,4</sup>
MUSI 2311	MUS 612A	SGNL 1302	ASL 307 <sup>3,4</sup>
MUSI 2312	MUS 612B	SGNL 1401	ASL 406 <sup>3,4</sup>
PHED 1306	KIN 313 (Topic 1) <sup>1</sup> KIN 319K <sup>1</sup>	SGNL 1402	ASL 407 <sup>3,4</sup>
PHED 1308		SGNL 2301	ASL 312K <sup>4</sup>
PHED 1321	KIN 319K <sup>1</sup>	SGNL 2302	ASL 312L <sup>4</sup>
PHED 1331	KIN 314	SOCI 1301	SOC 302
PHED 2356	KIN 312 (Topic 2)	SOCI 1306	SOC 307E
PHIL 1301	PHL 301	SOCI 2301	SOC 307C
PHIL 2303	PHL 312	SOCI 2326	PSY 319K
PHIL 2306	PHL 318	SOCW 2361	S W 310

SPAN 1411	SPN 406 <sup>3</sup>
SPAN 1412	SPN 407 <sup>3</sup>
SPAN 2311	SPN 312K
SPAN 2312	SPN 312L
SPCH 1315	CMS 305 <sup>4</sup>
SPCH 1318	CMS 315M
SPCH 1321	CMS 306M
SPCH 2333	CMS 310K
TECA 1303	HDF 304
TECA 1354	HDF 313

<sup>1</sup> This is a modified course number with a higher credit value than is normally offered at the University. The higher value does not affect the course's prerequisite or degree applicability.

<sup>2</sup> Lower-division biology courses may transfer as generic credit, without a specific University course number. The terms "Frmn" and "Soph" identify freshman- and sophomore-level lecture credit. "Lab" identifies lower-division laboratory credit. For students in the School of Biological Sciences, such credit is applicable toward prerequisite and degree requirements only with department approval. For students in other degree plans that require specific biology courses, such credit is applicable only with the approval of the student's academic dean. Introductory major-track lecture credit (TCCN BIOL 1406, 1407, 1306, or 1307) generally transfers as BIO 311C and 311D (http://catalog.utexas.edu/undergraduate/appendix-a). Major-track laboratory credit (TCCN BIOL 1106, 1107, or the lab components of 1406 and 1407) generally transfers with the modified course numbers BIO 206LA and 206LB.

Nonmajor lecture credit (TCCN BIOL 1408, 1409, 1308, or 1309) generally transfers as Biology 301L (http://catalog.utexas.edu/ undergraduate/appendix-a) and 301M (http://catalog.utexas.edu/ undergraduate/appendix-a). Nonmajor laboratory credit (TCCN BIOL 1108, 1109, or the lab components of 1408 and 1409) transfers generically, because the University does not offer nonmajor lab courses.

- <sup>3</sup> This is a modified course number with a lower credit value than is normally offered at the University. In many cases, such transfer credit may be counted toward prerequisite or degree requirements in place of the higher-value University course; however, such substitution is at the discretion of the student's academic dean.
- <sup>4</sup> This is a course no longer offered at the University but still used in awarding transfer credit and still applicable toward certain degree requirements. For students in the School of Nursing, BIOL 2420, 2421, 2320, 2321, 2120, and 2121 transfer as retired microbiology courses.
- <sup>5</sup> Texas community colleges do not offer direct equivalents of The University of Texas at Austin's GOV 310L, 312L. or 312P. GOVT 2305+2306 together fulfill the core 070 requirement. Either GOVT 2305 or 2306 combines with GOV 310L (but <u>not</u> with 312L or 312P) to fulfill the core 070 requirement.
- <sup>6</sup> For School of Architecture students, ARCH 1311 transfers as generic architecture credit and Architecture 308 (http:// catalog.utexas.edu/undergraduate/appendix-a) must be taken in residence.

# Appendix B: Course Abbreviations

The University offers courses in the following fields of study. The abbreviations in the second column are used in catalogs, course schedules, and student records. Some of the fields listed are offered only at the graduate level.

Field of Study	Abbreviation
Field of Study Accounting	ACC
Accounting Actuarial foundations	ACC
Advertising	ACF
5	ADV
Aerospace engineering	ASE
African and African diaspora studies	AFR
Air force science	
American Sign Language	ASL
American studies	AMS
Ancient history and classical civilization	AHC
Anthropology	ANT
Applied learning and development	ALD
Arabic	ARA
Architectural engineering	ARE
Architectural interior design	ARI
Architecture	ARC
Art education	AED
Art history	ARH
Arts and entertainment technology	AET
Asian American studies	AAS
Asian studies	ANS
Astronomy	AST
Bassoon	BSN
Bengali	BEN
Biochemistry	BCH
Biology	BIO
Biomedical engineering	BME
Bridging disciplines	BDP
Business administration	ΒA
Business, government, and society	BGS
Chemical engineering	CHE
Chemistry	СН
Chinese	CHI
Civil engineering	CE
Clarinet	CLA
Classical civilization	СС
Cognitive science	CGS
Communication	COM
Communication and leadership	CLD
Communication sciences and disorders	CSD
Communication studies	CMS
Community and regional planning	CRP
Comparative literature	CL
Computational engineering	COE
Computational science, engineering, and mathematics	CSE
Computer science	CS

Conducting	CON
Core texts and ideas	CTI
Creative writing	CRW
Cultural studies	CLS
Curriculum and instruction	EDC
Czech	CZ
Danish	DAN
Design	DES
Developmental studies	DEV
Double bass	D B
Drum set	DRS
Dutch	DCH
Economics	ECO
Educational administration	EDA
Educational leadership and policy	ELP
Educational psychology	EDP
Electrical engineering	EE
Energy and earth resources	EER
Engineering management	ENM
Engineering mechanics	EM
Engineering studies	ES
English	E
English as a second language	ESL
Ensemble	ENS
Environmental engineering	EVE
Environmental science	EVS
Euphonium	EUP
European studies	EUS
Finance	FIN
Fine arts	FA
Finnish	FNH
Flute	FLU
Foreign language education	FLE
French	FR
French civilization	FC
French horn	FH
General engineering	G E
Geography	GRG
Geological sciences	GEO
German	GER
German, Scandinavian, and Dutch studies	GSD
Government	GOV
Graduate school	GRS
Greek	GK
Guitar	GUI
Harp	HAR
Harpsichord	HSC
Health and society	HS
Health education	HED
Hebrew	HEB
Hindi	HIN
History	HIS
Human development and family sciences	HDF
Human dimensions of organizations	HDO
Human ecology	HE

Humanities	HMN	Pashto	PSH
Iberian and Latin American languages and cultures	ILA	Percussion	PER
Identity management and security	IMS	Performance	PRF
Indigenous languages of Latin America	LAL	Persian	PRS
Information studies	INF	Petroleum and geosystems engineering	PGE
Integrated design	ITD	Pharmacy	PHR
International business	ΙB	Pharmacy graduate studies	PGS
International relations and global studies	IRG	Pharmacy PharmD	PHM
Islamic studies	ISL	Philosophy	PHL
Italian	ITL	Physical education	PED
Italian civilization	ITC	Physical science	PS
Japanese	JPN	Physics	PHY
Jewish studies	JS	Piano	PIA
Journalism	J	Polish	POL
Kinesiology	KIN	Portuguese	POR
Korean	KOR	Portuguese civilization	PRC
Language teaching and coordination	LTC	Psychology	PSY
Landscape architecture	LAR	Public affairs	ΡA
Latin	LAT	Public health	PBH
Latin American studies	LAS	Public relations	P R
Law	LAW	Public safety	PSF
Legal environment of business	LEB	Radio-television-film	RTF
Liberal arts	LA	Real estate	RE
Liberal arts honors	LAH	Recorder	REC
Linguistics	LIN	Religious studies	RS
Malayalam	MAL	Rhetoric and writing	RHE
Management	MAN	Risk management	RM
Management information systems	MIS	Russian	RUS
Manufacturing systems engineering	MFG	Russian, East European, and Eurasian studies	REE
Marine science	MNS	Sanskrit	SAN
Marketing	МКТ	Saxophone	SAX
Materials science and engineering	MSE	Science	SCI
Mathematics	М	Science and technology commercialization	STC
Mechanical engineering	ME	Science, technology, and society	STS
Medicine	MED	Science, technology, engineering, and mathematics	STM
Medieval studies	MDV	education	
Mexican American studies	MAS	Serbian/Croatian	SC
Middle Eastern languages and cultures	MEL	Slavic	SLA
Middle Eastern studies	MES	Slavic and Eurasian languages	SEL
Military science	MS	Social science	SS
Molecular biology	MOL	Social work	SW
Music	MUS	Sociology	SOC
Music business	MBU	South Asian Languages	SAL
Music recording technology	MRT	Spanish	SPN
Natural sciences	NSC	Spanish civilization	SPC
Naval science	N S	Special education	SED
Neuroscience	NEU	Statistics	STA
Norwegian	NOR	Statistics and data sciences	SDS
Nursing	Ν	Studio art	ART
Nutrition	NTR	Sustainability studies	SUS
Oboe	OBO	Swahili	SWA
Opera	OPR	Swedish	SWE
Operations management	0 M	Tamil	TAM
Operations research and industrial engineering	ORI	Telugu	TEL
Organ	ORG	Textiles and apparel	ТХА

Theatre and dance	T D
Trombone	TRO
Trumpet	TRU
Tuba	TBA
Turkish	TUR
Tutorial course	ΤC
Undergraduate studies	UGS
Urban studies	URB
Urdu	URD
UTeach-liberal arts	UTL
UTeach-natural sciences	UTS
Vibraphone	VIB
Viola	VIA
Violin	VIO
Violoncello	V C
Visual art studies	VAS
Voice	VOI
Women's and gender studies	WGS
Writing	WRT
Yiddish	YID
Yoruba	YOR

## **School of Architecture Faculty**

The following faculty list represents those appointed in the 2018 spring semester.

Dm Addington, Professor Henry M. Rockwell Chair in Architecture DEnvironD, Harvard University, 1997

Dean J Almy, Associate Professor MArch, University of Texas at Austin, 1989

Anthony Alofsin, Professor Roland Gommel Roessner Centennial Professorship in Architecture PhD, Columbia University in the City of New York, 1987

Kevin S Alter, Professor The Sid W. Richardson Centennial Professorship in Architecture MArch, Harvard University, 1990

Brian D Andrews, Lecturer MArch, Princeton University, 1989

Simon D Atkinson, Professor Mike Hogg Professorship in Community and Regional Planning PhD, University of Sheffield, 1989

Adam Barbe, Lecturer MLA, University of Texas at Austin, 2008

M W Bell, Professor Emeritus BArch, University of Texas at Austin, 1960

Michael L Benedikt, Professor Hal Box Endowed Chair in Urbanism MEnvironD, Yale University, 1975

Miroslava M Benes, Associate Professor PhD, Yale University, 1989

Kory Bieg, Assistant Professor MArch, Columbia University in the City of New York, 2002

Judith C Birdsong, Lecturer MArch, University of Florida, 1992

John P Blood, Distinguished Senior Lecturer MArch, Yale University, 1987

Michael R Boduch, Lecturer MArch, University of Texas at Austin, 2012

Daniel R Bonilla MA, Oxford Brookes University, 1990

Jon A Bowman, Professor Emeritus MArch, University of Texas at Austin, 1962

Danelle I Briscoe, Associate Professor MArch, Yale University, 2002

Richard L Cleary, Professor PhD, Columbia University in the City of New York, 1986

Coleman Coker, Adjunct Professor MFA, Memphis College of Art, 1994

Miriam S Collins, Assistant Professor MCityP, Massachusetts Institute of Technology, 2012 Robert J Coote, Professor Emeritus MA, Harvard University, 1959

Ulrich C Dangel, Associate Professor MArch, University of Oregon, 1999

Elizabeth A Danze, Professor Gene Edward Mikeska Endowed Chair for Interior Design, Bartlett Cocke Regents Professorship in Architecture MArch, Yale University, 1990

Charles H Di Piazza, Administrative Associate MArch, University of Texas at Austin, 1996

Gabriel Diaz Montemayor, Assistant Professor MArch, Auburn University, 2007

Larry A Doll, Associate Professor MArch, Cornell University, 1974

Tara A Dudley, Lecturer PhD, University of Texas at Austin, 2013

Matthew L Fajkus, Associate Professor MArch, Harvard University, 2005

Elizabeth Farrell, Lecturer MArch, University of Texas at Austin, 2015

Nerea Feliz Arrizabalaga, Assistant Professor BArch, Universidad Politecnica de Madrid (UPM), 2001

Juliana Felkner, Assistant Professor MArch, University of Kansas Main Campus, 2008

Ilse L Frank, Lecturer MLA, University of Pennsylvania, 2006

Frances Gale, Research Fellow MS, Columbia University in the City of New York, 1982

Sarah P Gamble, Lecturer MArch, University of Texas at Austin, 2005

Michael L Garrison, Professor MArch, Rice University, 1971

Carmen M Garufo, Research Fellow BArch, Pratt Institute, 1966

Tamie Michele Glass, Associate Professor MArch, University of Oregon, 2001

Francisco H Gomes, Associate Professor MArch, Harvard University, 1995

Martin Haettasch, Lecturer MArch, Princeton University, 2007

Michael G Hargens, Lecturer MArch, Parsons School of Design, 2006

Hope Hasbrouck, Associate Professor MLArch, Harvard University, 1996

David D Heymann, Professor Harwell Hamilton Harris Regents Professorship in Architecture MArch, Harvard University, 1988

Barbara Hoidn, Adjunct Associate Professor

#### MArchE, Universitat Friedericiana Karlsruhe, 1988

Michael Holleran, Associate Professor PhD, Massachusetts Institute of Technology, 1991

Benjamin Ibarra Sevilla, Assistant Professor MS, Universidad de Alcala, 2005

Richard W Jennings, Adjunct Professor PhD, Harvard University, 2008

Junfeng Jiao, Assistant Professor PhD, University of Washington - Seattle, 2010

Juan S Jofre-Lora, Lecturer MArch, Massachusetts Institute of Technology, 2014

Terry D Kahn, Professor Emeritus PhD, University of California-Berkeley, 1970

Alex Karner, Assistant Professor PhD, University of California-Davis, 2012

Nancy P Kwallek, Professor Emeritus PhD, Purdue University Main Campus, 1978

Fernando Luiz Lara, Associate Professor PhD, University of Michigan-Ann Arbor, 2001

Matthew Z Leach, Lecturer MArch, University of Texas at Austin, 2011

Daniel E Leary, Associate Professor Emeritus MArch, University of Pennsylvania, 1966

Edna Ledesma De Leon, Lecturer MArch, University of Texas at Austin, 2009

Gerlinde Leiding, Professor Emeritus MArch, Yale University, 1966

Charlton N Lewis, Lecturer MArch, University of Texas at Austin, 2013

Katherine E Lieberknecht, Assistant Professor PhD, Cornell University, 2008

Petra Gabriele Liedl, Adjunct Assistant Professor PhD, Technischen Universitat Munchen/Munich, 2007

Christopher A Long, Professor Martin S. Kermacy Centennial Professorship in Architecture PhD, University of Texas at Austin, 1993

Sarah L Lopez, Assistant Professor PhD, University of California-Berkeley, 2011

Mark Macek, Specialist BArch, University of Texas at Austin, 1990

Deborah Mary Mann, Lecturer MS, University of Cape Town, 1996

S Milovanovic-Bertram, Associate Professor MArch, Harvard University, 1974

Juan Miro, Professor David Bruton, Jr. Centennial Professorship in Urban Design MArch, Yale University, 1991

Elizabeth Mueller, Associate Professor

PhD, University of California-Berkeley, 1992

Morris J Neal, Lecturer BArch, Texas Tech University, 1984

Michael Oden, Associate Professor PhD, New Sch for Soc Research, 1992

Clay Odom, Assistant Professor MS, Columbia University in the City of New York, 2003

Jonathan A Ogren, Lecturer MA, University of Texas at Austin, 2008

Primo Orpilla, Visiting Professor BA, San Jose State University, 1988

Robert G Paterson, Associate Professor PhD, University of North Carolina at Chapel Hill, 1993

Ana Francisca Moreira Aroso Pinto De Oliveira, Lecturer MArch, Universitat Politecnica de Catalunya, 2008

Adam A Pyrek, Lecturer MA, Architectural Association School of Architecture, 2005

Rachael Rawlins, Senior Lecturer JD, University of Texas at Austin, 1993

Johanna H Reed, Lecturer MArch, University of Texas at Austin, 2012

Benjamin E Rice, Research Engineering/ Scientist Associate II MArch, Princeton University, 2011

Joyce Rosner, Senior Lecturer MArch, University of Houston, 1981

Stephen L Ross MA, University of Texas at Austin, 1990

Stefan K Schuster, Lecturer MS, University of Texas at Austin, 1996

Gian Claudia Sciara, Assistant Professor PhD, University of California-Berkeley, 2009

Daniel L Sharp, Lecturer MLA, University of Texas at Austin, 2006

Allan W Shearer, Associate Professor PhD, Harvard University, 2003

Keith A Shuley, Lecturer JD, University of Houston, 1981

Igor P Siddiqui, Associate Professor MArch, Yale University, 2003

Keith Simon, Lecturer MArch, University of Oregon, 2004

Bjorn I Sletto, Associate Professor PhD, Cornell University, 2006

Gregory W Smith, Lecturer MA, University of Delaware, 1991

Marla Smith, Lecturer MArch, University of Texas at Austin, 1996

Vincent L Snyder, Professor

MArch, Princeton University, 1988

Stephen M Sonnenberg, Adjunct Professor MD, Yeshiva University, 1965

Jason S Sowell, Associate Professor MArch, Harvard University, 2004

Lawrence W Speck, Professor The W. L. Moody, Jr. Centennial Professorship in Architecture MArch, Massachusetts Institute of Technology, 1972

Nicholas Daniel Steshyn, Lecturer MArch, University of Texas at Austin, 2014

Richard P Swallow, Professor Emeritus MArch, Massachusetts Institute of Technology, 1957

Rabun M Taylor, Professor PhD, University of Minnesota-Twin Cities, 1997

Danilo F Udovicki, Associate Professor PhD, Massachusetts Institute of Technology, 1995

Clare W Van Montfrans, Lecturer MArch, University of Texas at Austin, 2016

Gary Wang, Lecturer MArch, University of Michigan-Ann Arbor, 1998

Wilfried Wang, Professor O'Neil Ford Centennial Chair in Architecture MS, University College London, 1981

Jacob A Wegmann, Assistant Professor MCP, Massachusetts Institute of Technology, 2006

Samantha J Whitney Schwarze, Lecturer MArch, University of Texas at Austin, 2013

Dason M Whitsett, Lecturer MS, University of Texas at Austin, 2005

Nichole Wiedemann, Associate Professor MA, Princeton University, 1992

Roxanne K Williamson, Professor Emeritus MA, University of Texas at Austin, 1965

Patricia A Wilson, Professor PhD, Cornell University, 1975

Jennifer L Wong, Curator MArch, University of Texas at Austin, 2013

Ming Zhang, Professor PhD, Massachusetts Institute of Technology, 2002

### Red McCombs School of Business Faculty

The following faculty list represents those appointed in the 2018 spring semester.

Robert J Adams Jr, Senior Lecturer Management PhD, Capella University, 2007

Shiva Agarwal, Assistant Professor Management PhD, University of Pennsylvania, 2017

James W Albrecht Jr, Lecturer Accounting BBA, University of Texas at Austin, 1975

Joshua D Alexander, Lecturer Finance MBA, University of Pennsylvania, 2009

Megan E Allen, Lecturer Accounting MPA, University of Texas at Austin, 2006

John R Allison, Professor Mary John and Ralph Spence Centennial Professorship JD, Baylor University, 1972

Andres Almazan, Professor Finance PhD, Massachusetts Institute of Technology, 1996

Mark I Alpert, Professor Emeritus Marketing DBA, University of Southern California, 1968

Aydogan Alti, Associate Professor Finance PhD, Carnegie Mellon University, 2002

Gregory A Alves, Lecturer Finance MBA, University of San Francisco, 1994

Richard A Amato, Lecturer Management MBA, University of Texas at Austin, 1998

Edward G Anderson Jr, Professor Mr. and Mrs. William F. Wright, Jr. Centennial Professorship for Management of Innovative Technology Management PhD, Massachusetts Institute of Technology, 1997

Urton L Anderson, Professor Emeritus Accounting PhD, University of Minnesota-Twin Cities, 1985

Victor L Arnold, Professor Emeritus Management PhD, University of Wisconsin-Madison, 1971

Mihran A Aroian, Lecturer Management MBA, University of Texas at Austin, 1988

Florence J Atiase, Lecturer Accounting MAcc, University of Florida, 1983

Rowland Atiase, Professor Accounting PhD, University of California-Berkeley, 1980

Patrick G Badolato, Lecturer Accounting PhD, Duke University, 2010

Michael J Barrett, Lecturer Management

#### PhD, University of Texas at Austin, 1994

Caroline A Bartel, Associate Professor Management PhD, University of Michigan-Ann Arbor, 1998

Taylor Bentley, Assistant Professor Marketing PhD, Washington University in St Louis, 2015

Ben A Bentzin, Lecturer Marketing MBA, University of Pennsylvania, 1992

Y Sekou Bermiss, Assistant Professor Management PhD, Northwestern University, 2009

Harlan T Beverly, Lecturer Management MBA, University of Texas at Austin, 2004

Steven M Bowers, Lecturer Finance JD, University of Texas at Austin, 1982

Mark L Bradshaw, Lecturer Accounting JD, University of Texas at Austin, 1988

Floyd S Brandt, Professor Emeritus Management DBA, Harvard University, 1960

Dean A Bredeson, Distinguished Senior Lecturer JD, University of Texas at Austin, 1995

Steven Miller Brister, Lecturer Marketing MBA, University of Texas at Austin, 1989

Patrick L Brockett, Professor Gus Wortham Memorial Chair in Risk Management and Insurance Finance PhD, University of California-Irvine, 1975

Andrew Brodsky, Assistant Professor Management PhD, Harvard University, 2017

Susan M Broniarczyk, Professor Susie and John L. Adams Endowed Chair in Business Marketing PhD, University of Florida, 1992

Keith C Brown, Professor Finance PhD, Purdue University Main Campus, 1981

Patti J Brown, Lecturer Accounting MPA, University of Texas at Austin, 1989

Ethan R Burris, Associate Professor Management PhD, Cornell University, 2005

John Burrows, Lecturer Management

#### PhD, Tulane University, 2003

John C Butler, Clinical Associate Professor Finance PhD, University of Texas at Austin, 1998

Johnny S Butler, Professor J. Marion West Chair for Constructive Capitalism Management PhD, Northwestern University, 1974

Daniel O Campbell, Lecturer Finance MBA, University of Texas at Austin, 2006

William Carpenter, Lecturer Finance MBA, Texas A & M University, 2008

Carlos Marinho Carvalho, Professor Finance PhD, Duke University, 2006

Eric Chan, Assistant Professor Accounting PhD, University of Pittsburgh, Pittsburgh Campus, 2015

Gretchen B Charrier, Senior Lecturer Accounting MPA, University of Texas at Austin, 1996

Shuping Chen, Professor The Wilton E. and Catherine A. Thomas Professorship in Accounting Accounting PhD, University of Southern California, 2003

Michael B Clement, Professor KPMG Centennial Professorship Accounting PhD, Stanford University, 1997

Jonathan B Cohn, Associate Professor Finance PhD, University of Michigan-Ann Arbor, 2008

Julia L Coronado, Assistant Professor Finance PhD, University of Texas at Austin, 1997

Stephen E Courter, Lecturer Management MSBA, George Washington University, 1982

Eli P Cox III, Professor Emeritus Marketing DBA, Indiana University at Bloomington, 1973

Frank B Cross, Professor Emeritus JD, Harvard University, 1980

William H Cunningham, Professor James L. Bayless Chair for Free Enterprise Marketing PhD, Michigan State University, East Lansing, 1971

John A Daly, Professor Texas Commerce Bancshares, Inc. Centennial Professorship in Business Communication, Frank A. Liddell, Sr. Centennial Professorship in Communication Management PhD, Purdue University Main Campus, 1977

Paul Damien, Professor B. M. (Mack) Rankin, Jr. Professorship in Business Administration Finance PhD, University of London, 1994

John W Davis, Lecturer Marketing MA, State University of New York at Binghamton, 1983

Justin T Day, Lecturer Finance MBA, University of Texas at Austin, 2006

James W Deitrick, Professor Emeritus Accounting DBA, University of Tennessee, 1977

Jade S Dekinder, Clinical Assistant Professor Marketing PhD, Emory University, 2007

Jeffrey S Dickerson, Lecturer JD, University of Texas at Austin, 1988

Douglas R Dierking, Senior Lecturer Management PhD, University of Texas at Austin, 1997

David M Dodd, Lecturer Marketing LLM, Georgetown University, 1981

John N Doggett, Senior Lecturer Management MBA, Harvard University, 1981

Andres Francisco Donangelo, Assistant Professor Finance PhD, University of California-Berkeley, 2011

Dain Donelson, Associate Professor Accounting PhD, University of Illinois at Urbana-Champaign, 2007

Aysa A Dordzhieva, Assistant Professor Accounting MS, Moscow State University, 2011

Minette E Drumwright, Associate Professor PhD, University of North Carolina at Chapel Hill, 1986

Jun A Duan, Associate Professor Marketing PhD, Duke University, 2006

Janet M Dukerich, Professor Harkins & Company Centennial Chair Management PhD, University of Minnesota-Twin Cities, 1985

Robert C Duvic, Distinguished Senior Lecturer Finance PhD, University of Texas at Austin, 1990

James S Dyer, Professor The Fondren Foundation Centennial Chair in Business Management PhD, University of Texas at Austin, 1969

Kathleen A Edwards, Senior Lecturer Management PhD, University of Texas at Austin, 1997

Megan Jean Ehrisman, Lecturer Marketing MA, Ball State University, 2008

Greta C Fenley, Lecturer Marketing MS, University of Oklahoma Health Sciences Center, 1999

Erica Fennewald, Lecturer Marketing MA, University of Missouri - Saint Louis, 2009

Anna C Fowler, Professor Emeritus Accounting PhD, University of Texas at Austin, 1977

Cesare Fracassi, Associate Professor Finance PhD, University of California-Los Angeles, 2009

James A Franklin, Lecturer Accounting MPA, University of Texas at Austin, 1993

James W Fredrickson, Professor Tom E. Nelson, Jr. Regents Professorship in Business Management PhD, University of Washington - Seattle, 1980

Robert N Freeman, Professor Arthur Andersen & Co. Alumni Centennial Professorship in Accounting Accounting PhD, University of Texas at Austin, 1977

Michael A Froehls, Lecturer Marketing PhD, Universitat Trier, 1995

William Fuchs, Associate Professor Finance PhD, Stanford University, 2005

Alessandro U Gabbi, Lecturer Marketing MBA, University of Texas at Austin, 1997

George W Gau, Professor Emeritus Finance PhD, University of Illinois at Urbana-Champaign, 1975

Kishore Gawande, Professor Century Club Professorship PhD, University of California-Los Angeles, 1991

Robert E George, Lecturer Accounting BBA, University of North Texas, 1971

Linda V Gerber, Senior Lecturer Marketing PhD, University of Texas at Austin, 1983

Andrew D Gershoff, Professor Foley's Professorship in Retailing Marketing PhD, University of Texas at Austin, 1999

Genevieve Jo Giambalvo, Lecturer Marketing MEd, University of Texas at Austin, 2015

Stephen M Gilbert, Professor Sam P. Woodson, Jr. Centennial Memorial Professorship in Business Management PhD, Massachusetts Institute of Technology, 1992

Kate Gillespie, Associate Professor Marketing PhD, University of London, 1983

Elizabeth S Goins, Lecturer Management MA, George Mason University, 2006

Bradley Michael Gold, Lecturer JD, University of Southern California, 2006

Linda L Golden, Professor Joseph H. Blades Centennial Memorial Professorship in Insurance Marketing PhD, University of Florida, 1975

Stephen G Goodson, Lecturer Accounting BA, Stephen F Austin State University, 1985

Melissa E Graebner, Associate Professor Management PhD, Stanford University, 2001

Brian E Graham-Moore, Professor Emeritus Management PhD, Washington University in St Louis, 1970

Michael H Granof, Professor Ernst & Young Distinguished Centennial Professorship of Accounting Accounting PhD, University of Michigan-Ann Arbor, 1972

Steven Gray Jr, Assistant Professor Management PhD, Washington University in St Louis, 2017

Robert T Green, Professor Emeritus Marketing PhD, Pennsylvania State University Main Campus, 1971

John M Griffin, Professor James A. Elkins Centennial Chair in Finance Finance PhD, Ohio State U Main Campus, 1997

Genaro J Gutierrez, Associate Professor Management PhD, Stanford University, 1988

Beverly L Hadaway, Associate Professor Emeritus Finance PhD, The University of Alabama, 1981

Warren J Hahn, Clinical Associate Professor Finance PhD, University of Texas at Austin, 2005 Greg F Hallman, Senior Lecturer Finance PhD, University of Texas at Austin, 1996

Nicholas Jennings Hallman, Assistant Professor Accounting PhD, University of Missouri - Columbia, 2016

Douglas Hannah, Assistant Professor Management PhD, Stanford University, 2016

Roy D Harris, Professor Emeritus Management PhD, University of California-Los Angeles, 1965

Thomas B Harris IV, Adjunct Professor Finance BA, Texas A & M University, 1980

David A Harrison, Professor Charles and Elizabeth Prothro Regents Chair in Business Administration Management PhD, University of Illinois at Urbana-Champaign, 1988

Jay C Hartzell, Professor Centennial Chair in Business Education Leadership, Lois and Richard Folger Dean's Leadership Chair in the McCombs School of Business, Trammell Crow Regents Professorship in Business Finance PhD, University of Texas at Austin, 1998

John William Hatfield, Professor Finance PhD, Stanford University, 2005

Pamela R Haunschild, Professor Emeritus Management PhD, Carnegie Mellon University, 1992

Jerry B Hays, Lecturer Accounting PhD, Nova Southeastern University, 2013

Isadore B Helburn, Professor Emeritus Management PhD, University of Wisconsin-Madison, 1966

Andrew D Henderson, Associate Professor Management PhD, University of Texas at Austin, 1996

Ty Henderson, Associate Professor Marketing PhD, University of Wisconsin-Madison, 2007

Karl E Henion II, Professor Emeritus Marketing PhD, University of Texas at Austin, 1967

Jonathan E Highbarger, Lecturer Marketing BBA, University of Texas at Austin, 1971

D E Hirst, Professor King Ranch Chair for Business Leadership, The John Arch White Professorship in Business Accounting

#### PhD, University of Minnesota-Twin Cities, 1992

Sebastian Hohenberg, Assistant Professor Marketing PhD, University of Mannheim, 2015

Terri Holbrook, Lecturer Accounting MS, University of Texas at Arlington, 1991

Tepera R Holman, Lecturer Marketing MEd, University of Texas at Austin, 2009

Wayne D Hoyer, Professor James L. Bayless/W. S. Farish Fund Chair for Free Enterprise Marketing PhD, Purdue University Main Campus, 1980

George P Huber, Professor Emeritus Management PhD, Purdue University Main Campus, 1966

Regina W Hughes, Distinguished Senior Lecturer Finance MS, University of North Texas, 1982

Paul J Irvine, Lecturer Finance PhD, University of Rochester, 1996

Julie R Irwin, Professor Marlene and Morton Meyerson Centennial Professorship in Business PhD, University of Colorado at Boulder, 1992

Kapil Jain, Senior Lecturer Marketing PhD, Columbia University in the City of New York, 1990

David B Jemison, Professor Emeritus Management PhD, University of Washington - Seattle, 1978

Ross G Jennings, Professor Deloitte & Touche Professorship in Accounting Accounting PhD, University of California-Berkeley, 1987

Nathan Michael Jensen, Professor PhD, Yale University, 2002

Jeffrey L Johanns, Lecturer Accounting BS, University of Illinois at Urbana-Champaign, 1977

Travis Lake Johnson, Assistant Professor Finance PhD, Stanford University, 2012

Donna Johnston-Blair, Lecturer Accounting MBA, University of Toronto, 1976

Stephanie C Jue, Lecturer JD, South Texas College of Law, 2002

Steven J Kachelmeier, Professor Randal B. McDonald Chair in Accounting Accounting

#### PhD, University of Florida, 1988

J W Kamas, Lecturer Accounting MBA, University of Chicago, 1991

Kelly L Kamm, Distinguished Senior Lecturer Finance PhD, University of Texas at Austin, 1992

Ari C Kang, Clinical Assistant Professor Finance PhD, Carnegie Mellon University, 2010

Orlando R Kelm, Associate Professor Marketing PhD, University of California-Berkeley, 1989

Woochan Kim, Visiting Professor Finance PhD, Harvard University, 1999

Carey W King, Lecturer PhD, University of Texas at Austin, 2004

William R Kinney Jr, Professor Emeritus Accounting PhD, Michigan State University, East Lansing, 1968

Amanda J Kious, Lecturer Marketing MS, Texas Tech University, 2006

Lisa L Koonce, Professor Deloitte & Touche Chair in Accounting Accounting PhD, University of Illinois at Urbana-Champaign, 1990

Meeta Kothare, Adjunct Professor Finance Management PhD, University of Rochester, 1992

Samuel Arthur Kruger, Assistant Professor Finance PhD, Harvard University, 2014

Karen M Landolt, Lecturer JD, Northeastern University, 2000

Kermit D Larson, Professor Emeritus Accounting DBA, University of Colorado at Boulder, 1966

Volker Laux, Professor Aubrey and Elsie Fariss Professorship in Accounting Accounting PhD, Johann Wolfgang Goethe University, 2003

Sanford J Leeds, Distinguished Senior Lecturer Finance JD, University of Virginia, 1989

Brian R Lendecky, Senior Lecturer Accounting MPA, University of Texas at Austin, 1999

Kathleen T Li, Assistant Professor Marketing

#### MS, University of Pennsylvania, 2014

Stephen T Limberg, Professor PricewaterhouseCoopers Centennial Professorship in Accounting Accounting PhD, Arizona State University Main, 1982

Thomas E Lindsay, Lecturer Management PhD, University of Texas at Austin, 2015

Inessa Liskovich, Assistant Professor Finance PhD, Princeton University, 2015

Robert Livengood, Lecturer Management PhD, University of Maryland College Park, 2010

Kristie J Loescher, Senior Lecturer Management PhD, Nova Southeastern University, 2004

James Richard Lowery Jr, Associate Professor Finance PhD, Carnegie Mellon University, 2009

Stephen P Magee, Professor James L. Bayless/Enstar Corp. Chair in Business Administration Finance PhD, Massachusetts Institute of Technology, 1969

Vijay Mahajan, Professor John P. Harbin Centennial Chair in Business Marketing PhD, University of Texas at Austin, 1975

Arthur B Markman, Professor Annabel Irion Worsham Centennial Professorship in Liberal Arts Marketing PhD, University of Illinois at Urbana-Champaign, 1992

David R Martin, Lecturer Finance MS, Carnegie Mellon University, 1981

Luis D Martins, Professor Herb Kelleher Chair in Entrepreneurship, James B. Goodson Professorship in Business Management PhD, New York University, 1997

Susan N Masson, Lecturer Marketing MEd, University of South Carolina - Columbia, 2001

Gregor Matvos, Professor Finance PhD, Harvard University, 2007

Robert G May, Professor Emeritus Accounting PhD, Michigan State University, East Lansing, 1970

Leigh M McAlister, Professor Ed and Molly Smith Chair in Business Administration Marketing PhD, Stanford University, 1978 John C McGuire Jr, Lecturer Accounting BA, Michigan State University, East Lansing, 1980

John M McInnis, Associate Professor Accounting PhD, University of Iowa, 2008

Christopher H Meakin, Senior Lecturer Management JD, University of Houston, 1987

Deirdre B Mendez, Lecturer Management Marketing PhD, University of Texas at Austin, 1986

Robert D Mettlen, Professor Emeritus Finance DBA, Indiana University at Bloomington, 1969

Herbert A Miller, Senior Lecturer Marketing BS, University of Hartford, 1968

James D Miller, Lecturer Finance MBA, University of Texas at Austin, 2007

Lillian F Mills, Professor Beverly H. and William P. O'Hara Endowed Chair in Business Accounting PhD, University of Michigan-Ann Arbor, 1996

John S Mitchell, Lecturer Marketing BBA, University of Texas at Austin, 1974

Leonard N Moore, Professor George W. Littlefield Professorship in American History Management PhD, Ohio State U Main Campus, 1998

Stephen J Moore, Lecturer Accounting MBA, University of Chicago, 1993

Douglas J Morrice, Professor Bobbie and Coulter R. Sublett Centennial Professorship Management PhD, Cornell University, 1990

Melissa Lynne Murphy, Lecturer Management PhD, University of Texas at Austin, 2017

Stephanie L Murphy, Lecturer Management PhD, Louisiana Tech University, 2015

Paula C Murray, Professor JD, University of Texas at Austin, 1980

Christopher J Muscarella, Visiting Professor Finance PhD, Purdue University Main Campus, 1983

Daniel P Neuhann, Assistant Professor Finance

#### PhD, University of Pennsylvania, 2016

Donald P Newman, Professor Emeritus Accounting PhD, University of Texas at Austin, 1977

James A Nolen Jr, Distinguished Senior Lecturer Emeritus Finance Finance MBA, University of Texas at Austin, 1976

Nathaniel Aaron Pancost, Assistant Professor Finance PhD, University of Chicago, 2016

Robert Parrino, Professor Lamar Savings Centennial Professorship in Finance Finance PhD, University of Rochester, 1992

Dennis S Passovoy, Lecturer Management MA, University of California-Los Angeles, 1974

Shefali V Patil, Assistant Professor Management PhD, University of Pennsylvania, 2014

Jeffery R Patterson, Lecturer PhD, University of Texas at Austin,

Gaylen Paulson, Senior Lecturer Management PhD, Northwestern University, 1998

Frances A Pedersen, Lecturer JD, Boston University, 1985

Michael S Peterson, Lecturer Management MS, University of Texas at Austin, 2014

Bill Peterson, Lecturer Marketing MBA, Southern Methodist University, 1984

David E Platt, Senior Lecturer Accounting PhD, Cornell University, 1997

Francisco Polidoro Jr, Associate Professor Management PhD, University of Michigan-Ann Arbor, 2006

Mary L Poloskey, Lecturer Finance MBA, University of Texas at Austin, 1988

Mandy T Pope, Lecturer Finance MLA, Texas A & M University, 2003

Robert A Prentice, Professor Ed and Molly Smith Centennial Professorship in Business Law JD, Washburn University, 1975

Katie Elizabeth Ortego Pritchett, Lecturer Management PhD, University of Texas at Austin, 2014 Tommy D Pryor, Lecturer Management EdD, University of North Texas, 1982

David Quintanilla, Lecturer JD, St Mary's University, 2013

Rajagopal Raghunathan, Professor Zale Corporation Centennial Professorship in Business Marketing PhD, New York University, 2000

Ramkumar Ranganathan, Assistant Professor Management PhD, University of Pennsylvania, 2012

Raghunath S Rao, Associate Professor Marketing PhD, University of Minnesota-Twin Cities, 2007

Ramesh K Rao, Professor The Margaret and Eugene McDermott Centennial Professorship of Banking and Finance Finance DBA, Indiana University at Bloomington, 1978

Bonnie Reese, Lecturer Management MA, New York University, 1995

Grace Renbarger, Lecturer JD, University of Texas at Austin, 1983

Brian Richter, Assistant Professor PhD, University of California-Los Angeles, 2010

Janet J Riekenberg, Lecturer Management PhD, University of Texas at Austin, 2010

Brian E Roberts, Professor PhD, Washington University in St Louis, 1986

Jack C Robertson, Professor Emeritus Accounting PhD, University of North Carolina at Chapel Hill, 1970

Ehud I Ronn, Professor Finance PhD, Stanford University, 1983

Stacey Rudnick, Lecturer Marketing MBA, Emory University, 1999

Merri S Ruhmann, Lecturer Marketing MEd, University of Texas at Austin, 2012

Michael A Sadler, Senior Lecturer Finance PhD, University of Texas at Austin, 1997

Scott R Sanderson, Lecturer Finance MBA, University of Chicago, 1991

Jaime Joy Schmidt, Associate Professor Accounting

#### PhD, Texas A & M University, 2009

Jan Schneider, Clinical Assistant Professor Finance PhD, University of British Columbia, 2006

Vito A Sciaraffia, Clinical Assistant Professor Finance PhD, University of California-Berkeley, 2011

Ronnie Shah, Lecturer Finance PhD, University of Texas at Austin, 2008

Clemens Sialm, Professor Texas Commerce Bancshares, Inc. Centennial Professorship in Commercial Banking Finance PhD, Stanford University, 2001

Stuart R Singer, Lecturer Accounting JD, Columbia University in the City of New York, 1965

Stephen T Smith, Lecturer Accounting MS, University of Virginia, 1994

Jeremy L Smitheal, Lecturer Finance MBA, University of Texas at Austin, 2003

Michael Sockin, Assistant Professor Finance PhD, Princeton University, 2015

Garrett P Sonnier, Associate Professor Marketing PhD, University of California-Los Angeles, 2006

Lewis J Spellman, Professor Finance PhD, Stanford University, 1971

David B Spence, Professor Herbert D. Kelleher Centennial Professorship in Business Law PhD, Duke University, 1997

William A Spiller, Lecturer Accounting PhD, Duke University, 1989

James C Spindler, Professor The Sylvan Lang Professorship JD, Harvard University, 2000

Rajashri Srinivasan, Professor Sam Barshop Centennial Professorship in Marketing Administration Marketing PhD, Pennsylvania State University Main Campus, 2000

Laura T Starks, Professor Charles E. and Sarah M. Seay Regents Chair in Finance Finance PhD, University of Texas at Austin, 1981

Deidra G Stephens, Lecturer Management PhD, University of Nebraska - Lincoln, 2009 James H Stephens, Lecturer Marketing MA, University of Texas at Austin, 1995

Edward L Summers, Professor Emeritus Accounting PhD, University of Texas at Austin, 1965

Sharath M Sury, Lecturer Finance MBA, University of Chicago, 1995

William B Swann Jr, Professor William Howard Beasley III Professorship in the Graduate School of Business Management PhD, University of Minnesota-Twin Cities, 1978

Xavier Sztejnberg, Lecturer Finance MBA, University of Pennsylvania, 1996

Elizabeth Teisberg, Professor PhD, Stanford University, 1988

Trent E Thurman, Lecturer Management MBA, University of Texas at Austin, 1994

Sheridan Titman, Professor Walter W. McAllister Centennial Chair in Financial Services Finance PhD, Carnegie Mellon University, 1981

Puay Khoon Toh, Associate Professor Management PhD, University of Michigan-Ann Arbor, 2007

Efstathios Tompaidis, Professor Finance PhD, University of Texas at Austin, 1994

Heidi K Toprac, Senior Lecturer Finance MBA, University of Texas at Austin, 1991

Sara M Toynbee, Assistant Professor Accounting PhD, University of Washington - Seattle, 2017

David B Verduzco, Lecturer Accounting MPA, University of Texas at Austin, 1993

Stephen M Walls, Senior Lecturer Marketing PhD, University of Texas at Austin, 2009

May Wang, Lecturer Accounting MPA, University of Texas at Austin, 2008

Adrian F Ward, Assistant Professor Marketing PhD, Harvard University, 2013

Keegan D Warren-Clem, Adjunct Professor JD, University of Texas at Austin, 2012

William J Way, Senior Lecturer

Finance MBA, University of Texas at Austin, 1989

Rachel Wellhausen, Assistant Professor PhD, Massachusetts Institute of Technology, 2012

Timothy Daniel Werner, Associate Professor PhD, University of Wisconsin-Madison, 2009

Brian White, Assistant Professor Accounting PhD, University of Illinois at Urbana-Champaign, 2012

Erin Wike, Lecturer Marketing MBA, DeVry University, 2010

Kenneth W Wiles, Clinical Associate Professor Finance PhD, University of Texas at Austin, 1991

Braden Mern Williams, Assistant Professor Accounting MAcc, Brigham Young University, 2009

John K Williams, Senior Lecturer Marketing MBA, University of Texas at Austin, 1994

Yong Yu, Associate Professor Accounting PhD, Pennsylvania State University Park, 2006

Alminas Zaldokas, Assistant Professor Finance PhD, Institut Europeen d'Administration des Affaires, 2012

Mindy Zhang Xiaolan, Assistant Professor Finance PhD, University of California-Los Angeles, 2014

Wuyang Zhao, Assistant Professor Accounting PhD, Fudan University, 2013

Ronghuo Zheng, Assistant Professor Accounting PhD, Carnegie Mellon University, 2016

Kristina Zvinakis, Senior Lecturer Accounting PhD, University of Texas at Austin, 1998

# Moody College of Communication Faculty

The following faculty list represents those appointed in the 2018 spring semester.

Michael D Akel, Lecturer Radio-Television-Film BS, Missouri State University, 1996

Wiley Akins, Lecturer Radio-Television-Film BFA, University of North Texas, 1976

Miguel A Alvarez, Lecturer Radio-Television-Film MFA, University of Texas at Austin, 2009

Rosental C Alves, Professor Knight Chair in Journalism Journalism BA, Universidade Federal do Rio de Janeiro, 1976

Henry A Anderson, Associate Professor Emeritus Journalism PhD, University of Texas at Austin, 1975

Joan M Balash, Specialist Communication Sciences and Disorders MA, University of Texas at Austin, 1987

Dawna Ballard, Associate Professor Communication Studies PhD, University of California-Santa Barbara, 2002

Micah R Barber, Lecturer Radio-Television-Film MFA, University of Texas at Austin, 2011

Joshua Ben Barbour, Assistant Professor Communication Studies PhD, University of Illinois at Urbana-Champaign, 2006

Benjamin L Bays, Lecturer Radio-Television-Film BA, University of Texas at Austin, 1998

Lisa M Bedore, Professor Communication Sciences and Disorders PhD, Purdue University Main Campus, 1998

Mary C Beltran, Associate Professor Radio-Television-Film PhD, University of Texas at Austin, 2002

Charles E Berg, Professor Joe M. Dealey, Sr. Professorship in Media Studies Radio-Television-Film PhD, University of Texas at Austin, 1987

Jay Michael Bernhardt, Professor Walter Cronkite Regents Chair in Communication, DeWitt C. Reddick Regents Chair in Communication Communication Studies PhD, University of North Carolina at Chapel Hill, 1999

Karen Bernstein, Lecturer Radio-Television-Film HS/GED, , 1979

Mark E Bernstein, Associate Professor Communication Sciences and Disorders EdD, Boston University, 1980

Mary A Bock, Assistant Professor Communication Studies Journalism PhD, University of Pennsylvania, 2009

Casey A Boyle, Assistant Professor Communication Studies PhD, University of South Carolina - Columbia, 2011

Paul Brady, Lecturer BSPR, University of Texas at Austin, 2003 Robert B Brenner, Professor G. B. Dealey Regents Professorship in Journalism Journalism BA, Oberlin College, 1983

Larry D Browning, Professor Emeritus Communication Studies PhD, Ohio State U Main Campus, 1973

Barry Brummett, Professor Charles Sapp Centennial Professorship in Communication Communication Studies PhD, University of Minnesota-Twin Cities, 1978

Gene A Burd, Associate Professor Emeritus Journalism PhD, Northwestern University, 1964

Michael Butterworth, Professor Communication Studies PhD, Indiana University at Bloomington, 2006

Courtney T Byrd, Associate Professor William David Blunk Memorial Professorship Communication Sciences and Disorders PhD, Vanderbilt University, 2003

Julia Campbell, Assistant Professor Communication Sciences and Disorders PhD, University of Colorado at Boulder, 2015

Angela A Carey, Clinical Assistant Professor Communication Sciences and Disorders AuD, Pennsylvania College of Optometry, 2009

Craig A Champlin, Professor Lillie Hage Jamail Centennial Professorship Communication Sciences and Disorders PhD, University of Kansas Main Campus, 1987

Bharath Chandrasekaran, Associate Professor Communication Sciences and Disorders PhD, Purdue University Main Campus, 2008

Andrew D Chavez, Lecturer Journalism MS, Texas Christian University, 2010

Karma Ruth Chavez, Associate Professor Communication Studies PhD, Arizona State University Main, 2007

Gina Chen, Assistant Professor Journalism PhD, Syracuse University Main Campus, 2012

Wenhong Chen, Associate Professor Journalism Radio-Television-Film PhD, University of Toronto, 2007

Richard A Cherwitz, Professor Ernest A. Sharpe Centennial Professorship in Communication Communication Studies PhD, University of Iowa, 1978

Deepak J Chetty, Lecturer Radio-Television-Film MFA, University of Texas at Austin, 2015

Hsiang I Chyi, Associate Professor Journalism PhD, University of Texas at Austin, 1999

Renita B Coleman, Professor Journalism PhD, University of Missouri - Columbia, 2001

James B Colson, Professor Emeritus Journalism MA, University of California-Los Angeles, 1961

Martin R Cox, Senior Lecturer Communication Studies MA, University of Texas at Austin, 1994

Isabella C Cunningham, Professor Stan Richards Chair in Advertising and Public Relations Strategy PhD, Michigan State University, East Lansing, 1972

Joe H Cutbirth, Lecturer Communication Studies PhD, Columbia University in the City of New York, 2011

Tracy S Dahlby, Professor Frank A. Bennack, Jr. Chair in Journalism Journalism AM, Harvard University, 1976

Rene M Dailey, Associate Professor Communication Studies PhD, University of California-Santa Barbara, 2005

Rodger M Dalston, Professor Emeritus Communication Sciences and Disorders PhD, Northwestern University, 1972

John A Daly, Professor Texas Commerce Bancshares, Inc. Centennial Professorship in Business Communication, Frank A. Liddell, Sr. Centennial Professorship in Communication Communication Studies PhD, Purdue University Main Campus, 1977

Dennis C Darling, Professor Journalism MFA, School of the Art Institute of Chicago, 1973

Barbara L Davis, Professor Emeritus Communication Sciences and Disorders PhD, University of Texas at Austin, 1986

D D Davis, Professor Communication Studies PhD, University of Texas at Arlington, 1995

Katherine Winkler Dawson, Senior Lecturer Journalism MS, Columbia University in the City of New York, 2003

Donna De Cesare, Associate Professor Journalism MPhil, University of Essex, 1979

Eileen Flynn Delao, Lecturer Journalism BA, Massachusetts College of Liberal Arts, 1998 Lisa Z Dobias BSAdv, University of Texas at Austin, 1989

David H Donaldson, Lecturer Journalism JD, University of Texas at Austin, 1976

Erin Eileen Donovan, Associate Professor Communication Studies PhD, University of Illinois at Urbana-Champaign, 2008

Anthony David Dudo, Associate Professor PhD, University of Wisconsin-Madison, 2011

Catherine T Eaton, Lecturer Communication Sciences and Disorders PhD, University of Maryland College Park, 2014

Drew Ferrante, Lecturer BA, University of Massachusetts Lowell, 1990

John F Fiege, Lecturer Radio-Television-Film MFA, University of Texas at Austin, 2006

James A Fino, Lecturer BS, University of Texas at Austin, 1988

Jessica Franco, Clinical Assistant Professor Communication Sciences and Disorders PhD, University of Texas at Austin, 2008

Caroline J Frick, Associate Professor Radio-Television-Film PhD, University of Texas at Austin, 2005

Kathryn Fuller, Professor William P. Hobby Centennial Professorship in Communication Radio-Television-Film PhD, Johns Hopkins University, 1992

Walter R Garcia-Buckalew, Lecturer Journalism MA, University of Texas at Austin, 1993

Andrew S Garrison, Professor Radio-Television-Film BA, Antioch University, 1974

Mikala J Gibson, Lecturer Radio-Television-Film BA, University of the Incarnate Word, 2000

Lalitha Gopalan, Associate Professor Radio-Television-Film PhD, University of Rochester, 1993

Amanda B Gotera, Lecturer Radio-Television-Film MFA, University of Texas at Austin, 2015

Paul H Gray, Professor Emeritus Communication Studies PhD, Louisiana State University and Agricultural and Mechanical College, 1966

Zenzi M Griffin, Professor Communication Sciences and Disorders PhD, University of Illinois at Urbana-Champaign, 1998 Joshua G Gunn, Associate Professor Communication Studies PhD, University of Minnesota-Twin Cities, 2002

Liberty Hamilton, Assistant Professor Communication Sciences and Disorders PhD, University of California-Berkeley, 2013

Sharon E Jarvis, Associate Professor Communication Studies PhD, University of Texas at Austin, 2000

Roderick P Hart, Professor Allan Shivers Centennial Chair in Communication Communication Studies PhD, Pennsylvania State University Park, 1970

David Libby Hays, Senior Lecturer Radio-Television-Film MFA, University of Southern California, 1987

Felicia D Henderson, Assistant Professor Radio-Television-Film MFA, University of California-Los Angeles, 2004

Sarah Hennigan, Lecturer Radio-Television-Film MFA, University of Texas at Austin, 2016

Maya L Henry, Assistant Professor Communication Sciences and Disorders PhD, University of Arizona, 2009

Nickole Ann Hines Staples, Lecturer Communication Sciences and Disorders MA, Michigan State University, East Lansing, 2006

Donald W Howard, Associate Professor Radio-Television-Film MA, University of Texas at Austin, 1988

Michelle Hsieh Pho, Lecturer Communication Sciences and Disorders PhD, University of Texas at Austin, 2013

Dina D Inman Ramgolam, Lecturer Communication Studies PhD, University of Texas at Austin, 2012

Robert W Jensen, Professor E. M. "Ted" Dealey Professorship in the Business of Journalism Journalism PhD, University of Minnesota-Twin Cities, 1992

Thomas Jerrold Johnson, Professor Amon G. Carter, Jr. Centennial Professorship in Communication Journalism PhD, University of Washington - Seattle, 1989

Jennifer L Jones Barbour, Lecturer PhD, University of Illinois at Urbana-Champaign, 2006

Sangeeta C Kamdar, Lecturer Communication Sciences and Disorders AuD, University of Texas at Austin, 2010

Stuart D Kelban, Associate Professor Radio-Television-Film MFA, University of Virginia, 1989 Diana Kerew-Shaw, Lecturer BFA, Boston University, 1964

Mark L Knapp, Professor Emeritus Communication Studies PhD, Pennsylvania State University Main Campus, 1966

Karen J Kocher, Senior Lecturer Radio-Television-Film MFA, University of Texas at Austin, 1995

William E Korbus, Professor Emeritus Journalism MS, University of Illinois at Urbana-Champaign, 1974

Rajinder Koul, Professor Houston Harte Centennial Professorship in Communication Communication Sciences and Disorders PhD, Purdue University Main Campus, 1994

Shanti Kumar, Associate Professor Radio-Television-Film PhD, Indiana University at Bloomington, 1987

Sean R Labounty, Lecturer BSAdv, University of Texas at Austin, 1997

Tamar Laddy, Lecturer Radio-Television-Film MFA, University of Southern California, 2003

Wei-Na Lee, Professor F. J. Heyne Centennial Professorship in Communication PhD, University of Illinois at Urbana-Champaign, 1988

Rosemary Lester-Smith, Assistant Professor Communication Sciences and Disorders PhD, University of Arizona, 2014

Anne Lewis, Senior Lecturer Radio-Television-Film BFA, School of Visual Arts, 2001

Deborah E Lewis, Lecturer Radio-Television-Film MFA, University of Texas at Austin, 1995

Richard M Lewis, Associate Professor Radio-Television-Film MFA, University of Texas at Austin, 1994

Jeffrey T Linwood, Lecturer Journalism SM, University of Texas at Austin, 2007

Chang Liu, Associate Professor Communication Sciences and Disorders PhD, Indiana University at Bloomington, 2002

Mark G Longaker, Associate Professor Communication Studies PhD, Pennsylvania State University Main Campus, 2003

Mirza Jeannette Lugo-Neris, Clinical Assistant Professor Communication Sciences and Disorders PhD, University of Texas at Austin, 2016

Joel Lulla, Lecturer JD, University of North Carolina at Chapel Hill, 1982 Madhavi Mallapragada, Associate Professor Radio-Television-Film PhD, University of Wisconsin-Madison, 2003

Thomas P Marquardt, Professor Ben F. Love Regents Professorship in Communication Communication Sciences and Disorders PhD, University of Washington - Seattle, 1973

Frederick N Martin, Professor Emeritus Communication Sciences and Disorders PhD, City University of New York Brooklyn College, 1968

Madeline M Maxwell, Professor Communication Studies PhD, University of Arizona, 1980

Jennifer McClearen, Lecturer Radio-Television-Film PhD, University of Washington - Seattle, 2017

Maxwell E McCombs, Professor Emeritus Journalism PhD, Stanford University, 1966

Cynthia Ann McCreery, Associate Professor Radio-Television-Film BA, University of California-Santa Barbara, 2000

Christian C McDonald, Lecturer Journalism BJ, University of Texas at Austin, 1989

Kathleen Oveta McElroy G. B. Dealey Regents Professorship in Journalism Journalism PhD, University of Texas at Austin, 2014

Matthew S McGlone, Professor Communication Studies PhD, Princeton University, 1994

Stephanie McMillen, Lecturer Communication Sciences and Disorders PhD, The University of Memphis, 2017

Cydney M Medford, Communication Sciences and Disorders Specialist Communication Sciences and Disorders MS, Baylor University, 1980

Stephen J Mims, Lecturer Radio-Television-Film MA, University of Texas at Austin, 1987

William D Minutaglio, Other University Affiliate Journalism MS, Columbia University in the City of New York, 1978

Dhiraj Murthy, Associate Professor Journalism PhD, University of Cambridge, 2008

Roland L Myers, Lecturer Radio-Television-Film BFA, University of Texas at Austin, 1999

Daniel R Nast, Lecturer Communication Sciences and Disorders

#### AuD, University of Florida, 2014

Curran J Nault, Lecturer Radio-Television-Film PhD, University of Texas at Austin, 2013

Philip P Nemy, Lecturer Radio-Television-Film BFA, Carnegie Mellon University, 1983

Susan Turner Nold, Senior Lecturer Communication Studies JD, University of Texas at Austin, 2004

Susan M O'connor, Lecturer Radio-Television-Film BA, University of Texas at Austin, 1994

Elizabeth D Pena, Professor Communication Sciences and Disorders PhD, Temple University, 1993

Korey A Pereira, Lecturer Radio-Television-Film BS, University of Texas at Austin, 2011

Maya C Perez, Lecturer Radio-Television-Film MFA, University of Texas at Austin, 2015

Alisa H Perren, Associate Professor Radio-Television-Film PhD, University of Texas at Austin, 2004

Paula M Poindexter, Professor Journalism PhD, Syracuse University Main Campus, 1980

Stuart G Pollok, Lecturer MFA, University of Southern California, 1993

Charles P Quarterman, Lecturer Journalism MA, University of Texas at Austin, 2006

Robert J Quigley, Senior Lecturer Journalism BA, Stephen F Austin State University, 1996

David G Quinto-Pozos, Associate Professor Communication Sciences and Disorders PhD, University of Texas at Austin, 2002

Paul J Raval, Assistant Professor Radio-Television-Film MFA, University of Texas at Austin, 2004

Ellis Clifford Reed, Clinical Professor Journalism AA, Newark School of Fine and Industrial Art, 1969

Stephen D Reese, Professor Jesse H. Jones Professorship in Journalism Journalism PhD, University of Wisconsin-Madison, 1982

Scott F Rice, Lecturer Radio-Television-Film MFA, University of Texas at Austin, 2003 Mary Magdalen Rivas-Rodriguez, Professor Journalism PhD, University of North Carolina at Chapel Hill, 1998

Kevin Daniel Robbins, Senior Lecturer Journalism MS, Ohio University Main Campus, 1995

Joel D Rollins, Senior Lecturer Communication Studies PhD, University of North Texas, 1996

Ryan Romero, Lecturer MA, University of Texas at Austin, 2004

John Savage, Lecturer Journalism MA, University of Texas at Austin, 2017

Thomas G Schatz, Professor Mrs. Mary Gibbs Jones Centennial Chair in Communication Radio-Television-Film PhD, University of Iowa, 1976

Nancy Schiesari, Professor Radio-Television-Film MA, Royal College of Art, 1978

Mary Schmitt, Assistant Professor Communication Sciences and Disorders PhD, Ohio State U Main Campus, 2013

David A Schneider, Lecturer Radio-Television-Film MA, Temple University, 2014

Suzanne Scott, Assistant Professor Radio-Television-Film PhD, University of Southern California, 2011

Andrew B Shea, Professor Radio-Television-Film MA, California Institute of the Arts, 1985

Prarthana Shivabasappa, Lecturer Communication Sciences and Disorders PhD, All India Institute of Speech, 2016

Rajka Smiljanic, Associate Professor Communication Sciences and Disorders PhD, University of Illinois at Urbana-Champaign, 2002

Dwain Y Smith, Associate Professor Radio-Television-Film MFA, University of Texas at Austin, 2006

Erna R Smith, Lecturer Journalism PhD, San Francisco State University, 1993

Spencer Smith, Assistant Professor Communication Sciences and Disorders PhD, University of Arizona, 2017

Ellen R Spiro, Professor Radio-Television-Film MA, State University of New York at Buffalo, 1991

Janet Staiger, Professor Emeritus Radio-Television-Film

#### PhD, University of Wisconsin-Madison, 1981

Paul J Stekler, Professor Wofford Denius Chair in Entertainment Studies Radio-Television-Film PhD, Harvard University, 1983

Keri K Stephens, Associate Professor Communication Studies PhD, University of Texas at Austin, 2005

Allucquere Sandy Stone, Associate Professor Emeritus Radio-Television-Film PhD, University of California-Santa Cruz, 1993

Patricia A Stout, Professor Isabella Cunningham Chair in Advertising PhD, University of Illinois at Urbana-Champaign, 1985

Joseph Straubhaar, Professor Amon G. Carter Centennial Professorship in Communication Journalism Radio-Television-Film PhD, Tufts University, 1981

Jurgen K Streeck, Professor Communication Studies PhD, Free University of Berlin, 1981

Natalie J Stroud, Associate Professor Communication Studies Journalism PhD, University of Pennsylvania, 2006

Scott R Stroud, Associate Professor Communication Studies PhD, Temple University, 2006

Sharon L Strover, Professor Philip G. Warner Regents Professorship in Communication Radio-Television-Film PhD, Stanford University, 1982

Madhu Sundarrajan, Clinical Assistant Professor Communication Sciences and Disorders PhD, University of Texas at Dallas, 2015

Harvey M Sussman, Professor R. P. Doherty, Sr. Centennial Professorship in Communication Communication Sciences and Disorders PhD, University of Wisconsin-Madison, 1970

Joel L Swerdlow, Adjunct Professor Communication Studies PhD, Cornell University, 1974

George Sylvie, Associate Professor Journalism PhD, University of Texas at Austin, 1988

Todd M Thompson, Lecturer Radio-Television-Film MA, University of Texas at Austin, 2010

Thomas Thoren, Lecturer MS, University of Illinois at Urbana-Champaign, 2013

Beau M Thorne, Lecturer Radio-Television-Film MFA, University of Texas at Austin, 2006

Russell G Todd, Professor Journalism PhD, Stanford University, 1982

Jeffrey Treem, Assistant Professor Communication Studies PhD, Northwestern University, 2012

Jeffrey K Tulis, Associate Professor Communication Studies PhD, University of Chicago, 1982

Kathleen R Tyner, Associate Professor Radio-Television-Film MA, San Francisco State University, 1986

Rima N Vallbona, Lecturer Journalism BJ, University of Texas at Austin, 1979

Anita L Vangelisti, Professor Jesse H. Jones Centennial Professorship in Communication Communication Studies PhD, University of Texas at Austin, 1989

Jeffrey Walker, Professor Communication Studies PhD, University of California-Berkeley, 1985

Samuel C Watkins, Professor Radio-Television-Film PhD, University of Michigan-Ann Arbor, 1994

Katharine E West, Lecturer Journalism PhD, University of Texas at Austin, 2012

Gary B Wilcox, Professor John A. Beck Centennial Professorship in Communication PhD, Michigan State University, East Lansing, 1982

Karin G Wilkins, Professor John P. McGovern Regents Professorship in Health and Medical Science Communication Radio-Television-Film PhD, University of Pennsylvania, 1991

Thomas J Willett, Lecturer Radio-Television-Film MA, University of Texas at Austin, 1999

Kristopher Wilson, Senior Lecturer Journalism PhD, University of Colorado at Boulder, 1993

Susan G Wrenn, Lecturer BS, California State University-Northridge, 1984

Amanda Zappler, Clinical Assistant Professor Communication Sciences and Disorders AuD, A T Still University of Health Sciences, School of Health Sciences, 2006

Rebecca A Zarate, Lecturer Communication Sciences and Disorders MA, University of Texas - Pan American, 2010

## **College of Education Faculty**

The following faculty list represents those appointed in the 2018 spring semester.

Lawrence D Abraham, Professor Kinesiology and Health Education EdD, Teachers College, Columbia University, 1975

Jennifer Keys Adair, Associate Professor Curriculum and Instruction PhD, Arizona State University Main, 2009

Ricardo C Ainslie, Professor M. K. Hage Centennial Professorship in Education Educational Psychology PhD, University of Michigan-Ann Arbor, 1979

Greg Allen, Clinical Associate Professor Educational Psychology PhD, San Diego State University, 2000

Adriana Alvarez, Assistant Professor Curriculum and Instruction PhD, University of Colorado at Boulder, 2017

Patricia A Aronin, Adjunct Professor Kinesiology and Health Education MD, University of North Carolina at Chapel Hill, 1975

Robin D Atwood, Research Assistant Professor Kinesiology and Health Education EdD, University of Texas at Austin, 1999

Heather Taylor Augustine, Clinical Assistant Professor Curriculum and Instruction MEd, University of Texas at Austin, 2006

Germine H Awad, Associate Professor Educational Psychology PhD, Southern Illinois University Carbondale, 2005

Flavio S Azevedo, Assistant Professor Curriculum and Instruction PhD, University of California-Berkeley, 2005

Marcia Barnes, Professor H. E. Hartfelder/The Southland Corporation Regents Chair in Human Resource Development Educational Psychology Special Education PhD, McMaster University, 1988

John Bartholomew, Professor Teresa Lozano Long Endowed Chair in Kinesiology and Health Education Kinesiology and Health Education PhD, Arizona State University Main, 1996

James P Barufaldi, Professor Emeritus Curriculum and Instruction PhD, University of Maryland College Park, 1972

Sarah K Bearman, Assistant Professor Educational Psychology PhD, University of Texas at Austin, 2005

Kimberly A Beckwith, Lecturer Kinesiology and Health Education PhD, University of Texas at Austin, 2006

Susan N Beretvas, Professor John L. and Elizabeth G. Hill Centennial Professorship Educational Psychology PhD, University of Washington - Seattle, 2000

Janie E Black, Clinical Assistant Professor Educational Psychology PhD, Fielding Graduate Institute, 2011

George M Blanco, Associate Professor Emeritus Curriculum and Instruction PhD, University of Texas at Austin, 1971

John G Bordie, Professor Emeritus Curriculum and Instruction PhD, University of Texas at Austin, 1958

Gary D Borich, Professor Emeritus Educational Psychology EdD, Indiana University at Bloomington, 1970

Maura Borrego, Professor Curriculum and Instruction PhD, Stanford University, 2003

Matthew Bowers, Clinical Assistant Professor Kinesiology and Health Education PhD, University of Texas at Austin, 2011

Gene Brooks, Lecturer Special Education PhD, University of Texas at Austin, 2000

Anthony L Brown, Associate Professor Curriculum and Instruction PhD, University of Wisconsin-Madison, 2006

Christopher P Brown, Professor Curriculum and Instruction PhD, University of Wisconsin-Madison, 2004

Keffrelyn D Brown, Associate Professor Curriculum and Instruction PhD, University of Wisconsin-Madison, 2006

Christopher G Brownson, Clinical Associate Professor Educational Psychology PhD, University of Texas at Austin, 2001

Lawrence A Brownstein, Senior Lecturer Educational Psychology PhD, University of Texas at Austin, 1977

Diane P Bryant, Professor Mollie Villeret Davis Professorship in Learning Disabilities Special Education PhD, University of New Mexico Main Campus, 1986

Lynne J Bryant, Clinical Assistant Professor Curriculum and Instruction PhD, University of Texas at Austin, 2017

Pamela S Buchanan, Lecturer Kinesiology and Health Education MA, Sam Houston State University, 1988

Angela M Bush-Richards, Lecturer Educational Psychology

#### PhD, University of Texas at Austin, 2006

Ralph W Cain, Associate Professor Emeritus Curriculum and Instruction PhD, University of Texas at Austin, 1964

Rebecca M Callahan, Associate Professor Curriculum and Instruction PhD, University of California-Davis, 2003

Lucy Camarillo, Lecturer Curriculum and Instruction MEd, University of Texas at Austin, 2009

Cindy I Carlson, Professor Educational Psychology PhD, Indiana University at Bloomington, 1982

Heather L Carter, Professor Emeritus Curriculum and Instruction PhD, University of Maryland College Park, 1969

Jennifer L Carter, Clinical Assistant Professor Educational Psychology PhD, University of Texas at Austin, 2004

Darla M Castelli, Professor Catherine Mae Parker Centennial Professorship in Education Kinesiology and Health Education PhD, University of South Carolina - Columbia, 2002

Stephanie W Cawthon, Associate Professor Educational Psychology Special Education PhD, University of Wisconsin-Madison, 2000

Claudia G Cervantes Soon, Assistant Professor Curriculum and Instruction PhD, University of Texas at Austin, 2011

Seung W Choi, Professor Educational Psychology PhD, University of Texas at Austin, 1996

Nathan Clemens, Associate Professor Special Education PhD, Lehigh University, 2009

Kevin O Cokley, Professor Oscar and Anne Mauzy Regents Professorship for Educational Research and Development Educational Psychology PhD, Georgia State University, 1998

Amanda K Colbert, Lecturer Kinesiology and Health Education MPH, University of Texas Health Science Center at San Antonio, 2014

Sarah M Collins, Lecturer Educational Psychology PhD, University of Texas at Austin, 2010

North A Cooc, Assistant Professor Special Education EdD, Harvard University, 2014

Edward F Coyle, Professor Kinesiology and Health Education PhD, University of Arizona, 1979 Charles W Craven, Associate Professor Emeritus Kinesiology and Health Education MEd, University of Texas at Austin, 1968

Don S Crowley Jr, Specialist Kinesiology and Health Education BS, University of Texas at Austin, 1990

Rosemary Magdalena Cuellar Torres, Lecturer Curriculum and Instruction MEd, University of Texas at El Paso, 2003

Nancy P Daley, Senior Lecturer Educational Psychology PhD, University of Texas at Austin, 1991

Ozro L Davis Jr, Professor Emeritus Curriculum and Instruction PhD, Vanderbilt University, 1958

Noah De Lissovoy, Associate Professor Curriculum and Instruction PhD, University of California-Los Angeles, 2005

Rosario C Deleon, Clinical Assistant Professor Educational Psychology PhD, University of Houston, 2005

Christian Doabler, Assistant Professor Special Education PhD, University of Oregon, 2010

Barbara G Dodd, Professor Pearson Endowed Professorship in Psychometrics Educational Psychology PhD, University of Texas at Austin, 1984

David J Drum, Professor Educational Psychology PhD, American University, 1969

Susan K Dubois, Adjunct Assistant Professor Kinesiology and Health Education MD, University of Texas Health Science Center at Houston, 1988

Bonnie M Elliott, Clinical Assistant Professor Curriculum and Instruction PhD, University of Texas at Austin, 1999

Michelle L Emery, Lecturer Kinesiology and Health Education MA, DePaul University, 2011

Edmund T Emmer, Professor Emeritus Educational Psychology PhD, University of Michigan-Ann Arbor, 1967

Susan B Empson, Professor Emeritus Curriculum and Instruction PhD, University of Wisconsin-Madison, 1994

Nicholas M Enge, Lecturer Kinesiology and Health Education MS, Stanford University, 2012

John D Fair, Adjunct Professor Kinesiology and Health Education PhD, Duke University, 1970

Toni L Falbo, Professor

Educational Psychology PhD, University of California-Los Angeles, 1973

Terry S Falcomata, Associate Professor Special Education PhD, University of Iowa, 2008

Brian K Farr, Senior Lecturer Kinesiology and Health Education MA, Ohio State U Main Campus, 1996

Roger P Farrar, Professor Kinesiology and Health Education PhD, University of Massachusetts, 1976

Edmund J Farrell, Professor Emeritus Curriculum and Instruction PhD, University of California-Berkeley, 1969

Sherry L Field, Professor Emeritus Lee Hage Jamail Regents Chair in Education Curriculum and Instruction PhD, University of Texas at Austin, 1991

Tracey Terece Flores, Assistant Professor Curriculum and Instruction PhD, Arizona State University Main, 2017

Douglas E Foley, Professor Emeritus Curriculum and Instruction PhD, Stanford University, 1970

Christina L Fragale, Clinical Assistant Professor Special Education PhD, University of Texas at Austin, 2012

Michael T Fresques, Lecturer Educational Psychology PhD, University of Texas at Austin, 1991

Manda G Freytag, Specialist Kinesiology and Health Education BS, University of Texas at Austin, 2006

Joe L Frost, Professor Emeritus Curriculum and Instruction EdD, University of Arkansas Main Campus, 1965

Shernaz B Garcia, Associate Professor Emeritus Special Education PhD, University of Texas at Austin, 1984

Douglas C Garrard, Lecturer Educational Psychology EdD, University of Texas at Austin, 2006

Mary C Gerwels, Senior Lecturer Educational Psychology PhD, University of Texas at Austin, 1994

Lucia A Gilbert, Professor Emeritus Educational Psychology PhD, University of Texas at Austin, 1974

Dell P Giles, Specialist Curriculum and Instruction PhD, University of Georgia, 2010

Erik Gnagy, Clinical Assistant Professor Kinesiology and Health Education PhD, University of Texas at Austin, 2012

Maria Jorgelina Gonzalez Tristan, Assistant Professor Curriculum and Instruction PhD, Boston College, 2017

Nell H Gottlieb, Professor Emeritus Kinesiology and Health Education PhD, Boston University, 1981

Jane S Gray, Clinical Assistant Professor Educational Psychology PhD, University of Texas at Austin, 2006

Emily Strassner Greenspahn, Clinical Assistant Professor Educational Psychology PhD, University of Texas at Austin, 2006

Lisa Griffin, Associate Professor Kinesiology and Health Education PhD, University of Western Ontario, 1999

Lucy Guevara Velez, Lecturer Curriculum and Instruction PhD, University of Texas at Austin, 2013

Frank J Guszak, Professor Emeritus Curriculum and Instruction PhD, University of Wisconsin-Madison, 1966

Colby S Hall, Lecturer Special Education PhD, University of Texas at Austin, 2016

Dorothy R Hall, Clinical Assistant Professor Curriculum and Instruction PhD, University of Texas at Austin, 2009

Shannon Colleen Hanby, Lecturer Kinesiology and Health Education MPH, University of Georgia, 2012

William R Harmer, Professor Emeritus Curriculum and Instruction PhD, University of Minnesota-Twin Cities, 1959

Karol K Harris, Research Assistant Professor (Affiliated) Kinesiology and Health Education PhD, University of Texas at Austin, 2000

Louis Harrison, Professor Charles H. Spence, Sr. Centennial Professorship in Education Curriculum and Instruction PhD, Louisiana State University and Agricultural and Mechanical College, 1997

David Robert Heckler, Clinical Assistant Professor Educational Psychology PhD, Texas Tech University, 2012

James V Hoffman, Professor Priscilla Pond Flawn Regents Professorship in Early Childhood Education Curriculum and Instruction PhD, University of Missouri - Kansas City, 1977

Carole K Holahan, Professor Kinesiology and Health Education PhD, University of Texas at Austin, 1976

Elaine K Horwitz, Professor

Curriculum and Instruction PhD, University of Illinois at Urbana-Champaign, 1980

Hao-Yuan Hsiao, Assistant Professor Kinesiology and Health Education PhD, University of Delaware, 2015

Joan Hughes, Associate Professor Curriculum and Instruction PhD, Michigan State University, East Lansing, 2000

Thomas M Hunt, Associate Professor Kinesiology and Health Education PhD, University of Texas at Austin, 2007

Anita Israni, Lecturer Educational Psychology PhD, University of Texas at Austin, 2015

John L Ivy, Professor Emeritus Kinesiology and Health Education PhD, University of Maryland College Park, 1976

Earl Jennings, Professor Emeritus Educational Psychology PhD, University of Texas at Austin, 1963

Jody L Jensen, Professor Kinesiology and Health Education PhD, University of Maryland College Park, 1989

Julie M Jensen, Professor Emeritus Curriculum and Instruction PhD, University of Minnesota-Twin Cities, 1970

Rodolfo Jimenez Jr, Lecturer Curriculum and Instruction PhD, University of Texas at San Antonio, 2012

Esbelle M Jowers, Research Assistant Professor (Affiliated) Kinesiology and Health Education PhD, University of Texas at Austin, 1999

Hyeon-Ah Kang, Assistant Professor Educational Psychology PhD, University of Illinois at Urbana-Champaign, 2016

Xiaofen Keating, Associate Professor Curriculum and Instruction PhD, University of Illinois at Urbana-Champaign, 2000

Timothy Z Keith, Professor Educational Psychology PhD, Duke University, 1982

Darren D Kelly, Lecturer Kinesiology and Health Education PhD, University of Texas at Austin, 2012

Deborah C Kelt, Lecturer Curriculum and Instruction MA, University of Texas at Austin, 2008

Grace Kim, Assistant Professor Curriculum and Instruction PhD, University of California-Berkeley, 2017

John D King, Professor Emeritus Special Education EdD, University of Nebraska - Lincoln, 1964

Amy L Kinkade, Lecturer Curriculum and Instruction MEd, University of Texas at Austin, 1982

David A Klingbeil, Assistant Professor Educational Psychology PhD, University of Minnesota-Twin Cities, 2013

Eric Knuth, Professor Curriculum and Instruction PhD, University of Colorado at Boulder, 1999

William R Koch, Professor Emeritus Educational Psychology PhD, University of Missouri - Columbia, 1980

Harold Willis Kohl III, Research Professor Kinesiology and Health Education PhD, University of Texas Health Science Center at Houston, 1993

Gladys H Krause, Clinical Assistant Professor Curriculum and Instruction PhD, University of Texas at Austin, 2014

Sophie Lalande, Assistant Professor Kinesiology and Health Education PhD, University of Auckland, 2008

Dorothy D Lambdin, Clinical Professor Emeritus Kinesiology and Health Education EdD, University of Massachusetts, 1992

Lara Latimer, Lecturer Kinesiology and Health Education PhD, University of Texas at Austin, 2013

Cecil Wayne Lee, Specialist Kinesiology and Health Education BS, University of Texas at Austin, 1972

Judith W Lindfors, Professor Emeritus Curriculum and Instruction PhD, University of Texas at Austin, 1972

Amanda L Little, Clinical Assistant Professor Special Education PhD, University of Kansas Main Campus, 2009

Min Liu, Professor Curriculum and Instruction EdD, West Virginia University, 1992

Phillip D Long, Clinical Professor Educational Psychology PhD, Pennsylvania State University Park, 1983

Alexandra Loukas, Professor Barbie M. and Gary L. Coleman Professorship in Education Kinesiology and Health Education PhD, Michigan State University, East Lansing, 1997

Dorothy J Lovett, Associate Professor Emeritus Kinesiology and Health Education PhD, Texas Woman's University - Denton, 1968

Tia Madkins, Assistant Professor Curriculum and Instruction

#### PhD, University of California-Berkeley, 2016

Jennifer W Maedgen, Clinical Associate Professor Educational Psychology PhD, University of Texas at Austin, 1998

Robert M Malina, Professor Emeritus Kinesiology and Health Education PhD, University of Pennsylvania, 1968

Anna E Maloch, Professor Elizabeth Shatto Massey Endowed Chair in Education Curriculum and Instruction PhD, Vanderbilt University, 2000

Guy J Manaster, Professor Emeritus Educational Psychology PhD, University of Chicago, 1969

Jill A Marshall, Associate Professor Curriculum and Instruction PhD, University of Texas at Austin, 1984

Julie A Martinez, Lecturer Special Education PhD, University of Texas at Austin, 2016

Julie Maslowsky, Assistant Professor Kinesiology and Health Education PhD, University of Michigan-Ann Arbor, 2012

Christopher J McCarthy, Professor Educational Psychology PhD, Georgia State University, 1995

Lauren E McGill, Lecturer Kinesiology and Health Education MS, University of Texas at Austin, 2014

Nicole Kristen McLagan, Lecturer Kinesiology and Health Education PhD, University of Texas at Austin, 2014

Serena Messina, Lecturer Educational Psychology PhD, Universita degli Studi di Roma La Sapienza, 2016

Brian Miller, Clinical Professor Kinesiology and Health Education PhD, University of Texas Medical Branch, 1983

Lynn M Monnat, Clinical Assistant Professor Educational Psychology PhD, University of Texas at Austin, 2009

Leslie A Moore, Senior Lecturer Educational Psychology PhD, University of Texas at Austin, 1987

Karisma Lucia Morton, Clinical Assistant Professor Curriculum and Instruction PhD, University of Texas at Austin, 2017

Kathy Mosteller, Lecturer Kinesiology and Health Education BS, University of Alaska Anchorage, 1992

Katherine M Muenks, Assistant Professor Educational Psychology PhD, University of Maryland College Park, 2016

Sheri Mycue, Clinical Assistant Professor Curriculum and Instruction PhD, University of New Orleans, 2000

Kristin Neff, Associate Professor Educational Psychology PhD, University of California-Berkeley, 1997

Katherine A Noble, Lecturer Curriculum and Instruction MA, University of Texas at Austin, 2011

Nancy L Nussbaum, Lecturer Educational Psychology PhD, University of Texas at Austin, 1986

Fikile Nxumalo, Assistant Professor Curriculum and Instruction PhD, University of Victoria, 2015

Liesl Nydegger, Assistant Professor Kinesiology and Health Education PhD, Claremont Graduate University, 2015

Mark F O'Reilly, Professor Audrey Rogers Myers Centennial Professorship in Education Special Education PhD, University of Illinois at Urbana-Champaign, 1992

Jessica J Obleness, Clinical Assistant Professor Educational Psychology PhD, University of Iowa, 2015

Alba A Ortiz, Professor Emeritus Special Education PhD, University of Texas at Austin, 1976

Tolga Ozyurtcu, Clinical Assistant Professor Kinesiology and Health Education PhD, University of Texas at Austin, 2014

Michael Parent, Assistant Professor Educational Psychology PhD, University of Florida, 2013

Soyoung Park, Assistant Professor Special Education PhD, Stanford University, 2017

Randall M Parker, Professor Emeritus Special Education PhD, University of Missouri - Columbia, 1970

Keryn Elizabeth Pasch, Associate Professor Kinesiology and Health Education PhD, University of Minnesota-Twin Cities, 2007

Puja G Patel, Clinical Assistant Professor Educational Psychology PhD, University of Texas at Austin, 2010

James R Patton, Adjunct Associate Professor Special Education EdD, University of Virginia (Old Code), 1980

Katherina A Payne, Assistant Professor Curriculum and Instruction

#### MA, Adelphi University, 2004

Anthony J Petrosino, Associate Professor Curriculum and Instruction PhD, Vanderbilt University, 1998

Beeman N Phillips, Professor Emeritus Educational Psychology EdD, Indiana University at Bloomington, 1954

Miguel Pinedo, Assistant Professor Kinesiology and Health Education PhD, University of California-San Diego, 2015

Keenan A Pituch, Associate Professor Educational Psychology PhD, Florida State University, 1997

Jennifer A Porterfield, Lecturer Special Education PhD, University of Texas at Austin, 2011

Sarah Rannells Powell, Assistant Professor Special Education PhD, Vanderbilt University, 2009

James E Pustejovsky, Assistant Professor Educational Psychology PhD, Northwestern University, 2013

Martha I Pyron, Adjunct Assistant Professor Kinesiology and Health Education MD, University of Texas at San Antonio, 1996

Nayelli Ramos, Clinical Assistant Professor Curriculum and Instruction MEd, University of Texas at Austin, 2017

Kathryn E Redd, Lecturer Kinesiology and Health Education MSW, New Mexico State University Main Campus, 2010

Stuart Reifel, Professor Emeritus Curriculum and Instruction EdD, University of California-Los Angeles, 1981

Paul E Resta, Professor Ruth Knight Millikan Centennial Professorship Curriculum and Instruction PhD, Arizona State University Main, 1968

Geoff B Rich, Specialist Kinesiology and Health Education MA, Southwestern Baptist Theological Seminary, 1995

John M Rich, Professor Emeritus Curriculum and Instruction PhD, Ohio State U Main Campus, 1958

Frank C Richardson, Professor Emeritus Educational Psychology PhD, Colorado State University, 1971

Catherine Riegle-Crumb, Associate Professor Curriculum and Instruction PhD, University of Chicago, 2000

Herbert J Rieth, Professor Emeritus Special Education EdD, University of Kansas Main Campus, 1971

Aaron B Rochlen, Professor Educational Psychology PhD, University of Maryland College Park, 2000

Erin M Rodriguez, Assistant Professor Educational Psychology PhD, Vanderbilt University, 2012

Haydee M Rodriguez, Clinical Assistant Professor Curriculum and Instruction PhD, University of Texas at Austin, 2000

Laura K Rojeski, Lecturer Special Education PhD, University of Texas at Austin, 2015

Nancy L Roser, Professor Emeritus Curriculum and Instruction EdD, Indiana University at Bloomington, 1970

Stephanie S Rude, Professor Educational Psychology PhD, Stanford University, 1983

Cynthia S Salinas, Professor Ruben E. Hinojosa Regents Professorship in Education Curriculum and Instruction PhD, University of Texas at Austin, 1999

Victor Sampson, Associate Professor Curriculum and Instruction PhD, Arizona State University Main, 2007

Delida Sanchez, Assistant Professor Educational Psychology PhD, Columbia University in the City of New York, 2002

Micheal Paige Sandbank, Assistant Professor Special Education PhD, Vanderbilt University, 2015

Michael T Sanders, Senior Lecturer Kinesiology and Health Education EdD, University of Tennessee, 1985

James L Schaller, Associate Professor Special Education PhD, University of Wisconsin-Madison, 1991

Diane L Schallert, Professor Educational Psychology PhD, Arizona State University Main, 1975

Allison Skerrett, Associate Professor Curriculum and Instruction PhD, Boston College, 2007

Darla R Smith, Clinical Professor Kinesiology and Health Education PhD, Texas Woman's University - Denton, 1996

Elizabeth A Feger, Clinical Assistant Professor Curriculum and Instruction PhD, University of Texas at Austin, 2009

Jennifer C Smith, Lecturer Curriculum and Instruction

#### PhD, University of Arizona, 2002

Audrey M Sorrells, Associate Professor Special Education PhD, University of Florida, 1996

Emily Sparvero, Clinical Assistant Professor Kinesiology and Health Education PhD, University of Texas at Austin, 2008

Carol J Spaulding, Lecturer Kinesiology and Health Education PhD, University of Texas at Austin, 2009

Waneen W Spirduso, Professor Emeritus Kinesiology and Health Education EdD, University of Texas at Austin, 1966

Dixie Stanforth, Senior Lecturer Kinesiology and Health Education PhD, University of Texas at Austin, 2010

Philip R Stanforth, Senior Lecturer Kinesiology and Health Education MS, University of Arizona, 1978

Kevin D Stark, Professor Educational Psychology PhD, University of Wisconsin-Madison, 1985

Kathryn E Starkes Curriculum and Instruction PhD, University of Texas at Austin, 2009

Mary A Steinhardt, Professor Kinesiology and Health Education EdD, University of Houston, 1985

Audrey J Stone, Assistant Professor Kinesiology and Health Education PhD, University of Arkansas at Little Rock, 2010

Marie-Anne P Suizzo, Associate Professor Educational Psychology EdD, Harvard University, 1997

Marilla D Svinicki, Professor Emeritus Educational Psychology PhD, University of Colorado at Boulder, 1972

Deane A Swanson, Lecturer Kinesiology and Health Education MEd, Springfield College, 1979

Kathryn Klingler Tackett, Clinical Assistant Professor Special Education PhD, University of Texas at Austin, 2009

Hirofumi Tanaka, Professor Kinesiology and Health Education PhD, University of Tennessee, 1995

Deborah J Tharinger, Professor Emeritus Educational Psychology PhD, University of California-Berkeley, 1981

Janice S Todd, Professor Kinesiology and Health Education PhD, University of Texas at Austin, 1995 Martin L Tombari, Senior Lecturer Educational Psychology PhD, University of Arizona, 1975

Jessica R Toste, Assistant Professor Special Education PhD, McGill University, 2011

Marian E Trattner, Lecturer Kinesiology and Health Education MSW, University of Missouri - Columbia, 2008

Keith D Turner, Professor Emeritus Special Education PhD, University of Washington - Seattle, 1974

Kenneth W (Pete) Tyson, Associate Professor Emeritus Kinesiology and Health Education MEd, University of Texas at Austin, 1970

Luis Urrieta, Professor Suzanne B. and John L. Adams Endowed Professorship in Education Curriculum and Instruction PhD, University of North Carolina at Chapel Hill, 2003

Sepehr Vakil, Assistant Professor Curriculum and Instruction PhD, University of California-Berkeley, 2016

Richard Valencia, Professor Emeritus Educational Psychology PhD, University of California-Santa Barbara, 1977

Angela Valenzuela, Professor Curriculum and Instruction PhD, Stanford University, 1990

Sharon Vaughn, Professor Manuel J. Justiz Endowed Chair in Math, Science, and Technology in Teacher Education Special Education PhD, University of Arizona, 1981

Elizabeth G Walsh, Lecturer Educational Psychology PhD, University of Texas at Austin, 2016

Rachel Marie Watson, Specialist Kinesiology and Health Education MS, University of Texas at Austin, 2016

Melissa R Wetzel, Associate Professor Curriculum and Instruction PhD, Washington University in St Louis, 2007

Tiffany A Whittaker, Associate Professor Educational Psychology PhD, University of Texas at Austin, 2003

Frank W Wicker, Professor Emeritus Educational Psychology PhD, Princeton University, 1966

Molly T Wiebe, Clinical Assistant Professor Curriculum and Instruction PhD, University of Texas at Austin, 2016

Kelly J Williams, Lecturer Special Education

#### ME, Georgia Southern University, 2010

Brandy Windham, Lecturer Special Education MEd, University of Texas at Austin, 2014

Teri L Wood, Lecturer Educational Psychology PhD, University of Texas at Austin, 2006

Althea L Woodruff, Lecturer Special Education PhD, University of Texas at Austin, 2003

Mary J Worthy, Professor Curriculum and Instruction PhD, University of Virginia (Old Code), 1989

Veronica Yan, Assistant Professor Educational Psychology PhD, University of California-Los Angeles, 2014

San Yoon, Specialist Kinesiology and Health Education EdD, United States Sports Academy, 1992

Manuel X Zamarripa, Clinical Assistant Professor Educational Psychology PhD, University of Wisconsin-Madison, 2005

## Cockrell School of Engineering Faculty

The following faculty list represents those appointed in the 2018 spring semester.

Jacob A Abraham, Professor Cockrell Family Regents Chair in Engineering #8 Electrical and Computer Engineering PhD, Stanford University, 1974

P A Abusali, Lecturer Aerospace Engineering and Engineering Mechanics PhD, University of Texas at Austin, 1983

J K Aggarwal, Professor Emeritus Electrical and Computer Engineering PhD, University of Illinois at Urbana-Champaign, 1964

Maruthi R Akella, Professor E. P. Schoch Professorship in Engineering Aerospace Engineering and Engineering Mechanics PhD, Texas A & M University, 1998

Deji Akinwande, Associate Professor Electrical and Computer Engineering PhD, Stanford University, 2010

David T Allen, Professor Melvin H. Gertz Regents Chair in Chemical Engineering Chemical Engineering PhD, California Institute of Technology, 1983

Hal S Alper, Professor Paul D. and Betty Robertson Meek Centennial Professorship in Chemical Engineering Chemical Engineering PhD, Massachusetts Institute of Technology, 2006

Andrea Alu, Adjunct Professor Temple Foundation Endowed Professorship No. 3 Electrical and Computer Engineering Electrical and Computer Engineering PhD, Universita degli Studi Roma Tre, 2007

Catherine G Ambrose, Adjoint Associate Professor Biomedical Engineering PhD, University of Texas at Austin, 1992

Jeffrey G Andrews, Professor Cullen Trust for Higher Education Endowed Professorship in Engineering #1 Electrical and Computer Engineering PhD, Stanford University, 2002

Joshua Apte, Assistant Professor Civil, Architectural, and Environmental Engineering MS, University of California-Berkeley, 2008

Aristotle Arapostathis, Professor Electrical and Computer Engineering PhD, University of California-Berkeley, 1982

Neal E Armstrong, Professor Emeritus Civil, Architectural, and Environmental Engineering PhD, University of Texas at Austin, 1968

Ivo M Babuska, Professor Robert B. Trull Chair in Engineering Aerospace Engineering and Engineering Mechanics PhD, Academy of Sciences, 1955

Francois Baccelli, Professor Simons Chair in Mathematics and Electrical and Computer Engineering Electrical and Computer Engineering These d'Etat, Universite de Paris XI, Paris-Sud, 1983

Cem Bagdatlioglu, Lecturer Mechanical Engineering MS, University of Texas at Austin, 2015

Vaibhav Bahadur, Assistant Professor Mechanical Engineering PhD, Purdue University Main Campus, 2008

Aaron Blair Baker, Associate Professor Biomedical Engineering PhD, Harvard University, 2006

Lee E Baker, Professor Emeritus Electrical and Computer Engineering PhD, Baylor College of Medicine, 1965

Efstathios Bakolas, Assistant Professor Aerospace Engineering and Engineering Mechanics PhD, Georgia Institute of Technology, 2011

Michael Baldea, Associate Professor Chemical Engineering PhD, University of Minnesota-Twin Cities, 2006

Ross Baldick, Professor Electrical and Computer Engineering PhD, University of California-Berkeley, 1990

Matthew T Balhoff, Associate Professor

Petroleum and Geosystems Engineering PhD, Louisiana State University and Agricultural and Mechanical College, 2005

Sanjay K Banerjee, Professor Cockrell Family Regents Chair in Engineering #4 Electrical and Computer Engineering PhD, University of Illinois at Urbana-Champaign, 1983

Seth R Bank, Associate Professor Electrical and Computer Engineering PhD, Stanford University, 2006

James A Bankson, Adjoint Associate Professor Biomedical Engineering PhD, Texas A & M University, 2001

Suzanne Barber, Professor AT&T Foundation Endowed Professorship in Engineering Electrical and Computer Engineering PhD, University of Texas at Arlington, 1992

Jonathan F Bard, Professor Mechanical Engineering DSc, George Washington University, 1979

Joel W Barlow, Adjunct Professor Chemical Engineering PhD, University of Wisconsin-Madison, 1970

John W Barnes, Professor Emeritus Mechanical Engineering PhD, University of Arkansas Main Campus, 1971

Ronald E Barr, Professor Mechanical Engineering PhD, Marquette University, 1975

Don S Batory, Professor David Bruton, Jr. Centennial Professorship in Computer Sciences #1 Electrical and Computer Engineering PhD, University of Toronto, 1981

Martin L Baughman, Professor Emeritus Electrical and Computer Engineering PhD, Massachusetts Institute of Technology, 1972

Oguzhan Bayrak, Professor Civil, Architectural, and Environmental Engineering PhD, University of Toronto, 1999

Fred C Beach, Lecturer Chemical Engineering PhD, University of Texas at Austin, 2010

Joseph J Beaman Jr, Professor Earnest F. Gloyna Regents Chair in Engineering Mechanical Engineering ScD, Massachusetts Institute of Technology, 1979

Haley K Beasley Mechanical Engineering MD, Tulane University, 1962

Michael F Becker, Professor Electrical and Computer Engineering PhD, Stanford University, 1974

Anthony Bedford, Professor Emeritus

Aerospace Engineering and Engineering Mechanics PhD, Rice University, 1967

Mikhail A Belkin, Associate Professor Electrical and Computer Engineering PhD, University of California-Berkeley, 2004

Adela Ben-Yakar, Professor Biomedical Engineering Mechanical Engineering PhD, Stanford University, 2001

Jeffrey K Bennighof, Research Professor (Affiliated) Aerospace Engineering and Engineering Mechanics PhD, Virginia Polytechnic Institute and State University, 1986

Brenda L Berkelaar, Lecturer Mechanical Engineering PhD, Purdue University Main Campus, 2010

Srinivas V Bettadpur, Associate Professor Aerospace Engineering and Engineering Mechanics PhD, University of Texas at Austin, 1993

Amit Bhasin, Associate Professor Civil, Architectural, and Environmental Engineering DPhil, Texas A & M University, 2006

Abhimanyu Bhat, Lecturer Mechanical Engineering PhD, University of Texas at Austin, 2015

Chandra R Bhat, Professor Joe J. King Chair of Engineering Civil, Architectural, and Environmental Engineering PhD, Northwestern University, 1991

J Eric Bickel, Associate Professor Mechanical Engineering Petroleum and Geosystems Engineering PhD, Stanford University, 1999

George Biros, Professor W. A. "Tex" Moncrief, Jr. Endowment in Simulation-Based Engineering and Sciences - Endowed Chair No. 2 Mechanical Engineering PhD, Carnegie Mellon University, 2000

Fabrizio Bisetti, Assistant Professor Aerospace Engineering and Engineering Mechanics PhD, University of California-Berkeley, 2007

Benjamin A Black, Lecturer Aerospace Engineering and Engineering Mechanics Mechanical Engineering PhD, Georgia Institute of Technology, 2007

David T Blackstock, Professor Emeritus Mechanical Engineering PhD, Harvard University, 1960

David G Bogard, Professor Baker Hughes Incorporated Centennial Professorship Mechanical Engineering PhD, Purdue University Main Campus, 1982

Paul M Bommer, Distinguished Senior Lecturer Chevron Lectureship in Petroleum Engineering Petroleum and Geosystems Engineering

#### PhD, University of Texas at Austin, 1979

Roger T Bonnecaze, Professor William and Bettye Nowlin Chair in Engineering Chemical Engineering PhD, California Institute of Technology, 1991

John D Borcherding, Adjunct Professor Civil, Architectural, and Environmental Engineering PhD, Stanford University, 1972

Maura Borrego, Professor Mechanical Engineering PhD, Stanford University, 2003

Francis X Bostick Jr, Professor Emeritus Electrical and Computer Engineering PhD, University of Texas at Austin, 1964

David L Bourell, Professor Temple Foundation Endowed Professorship No. 2 Mechanical Engineering PhD, Stanford University, 1979

Alan C Bovik, Professor Cockrell Family Regents Chair in Engineering #3 Electrical and Computer Engineering PhD, University of Illinois at Urbana-Champaign, 1984

Stephen Boyles, Associate Professor Civil, Architectural, and Environmental Engineering PhD, University of Texas at Austin, 2009

John E Breen, Professor Emeritus Civil, Architectural, and Environmental Engineering PhD, University of Texas at Austin, 1962

Joan F Brennecke, Professor Cockrell Family Chair in Engineering #16 Chemical Engineering PhD, University of Illinois at Urbana-Champaign, 1989

Amy Brock, Assistant Professor Biomedical Engineering PhD, Harvard University, 2004

Gregory L Brooks, Senior Lecturer Civil, Architectural, and Environmental Engineering MArch, University of Texas at Austin, 1996

Andrew C Brown, Lecturer Civil, Architectural, and Environmental Engineering PhD, University of Texas at Austin, 2013

Michael D Bryant, Professor Mechanical Engineering PhD, Northwestern University, 1981

Tan T Bui, Assistant Professor Aerospace Engineering and Engineering Mechanics PhD, Massachusetts Institute of Technology, 2007

Margaret Elise Byers, Lecturer Mechanical Engineering PhD, University of Texas at Austin, 2017

John H Byrne, Adjoint Professor Biomedical Engineering PhD, Polytechnic University, 1973 Carlos H Caldas, Professor Civil, Architectural, and Environmental Engineering PhD, University of Illinois at Urbana-Champaign, 2003

Mehmet F Candas, Lecturer Mechanical Engineering PhD, University of Texas at Austin, 2007

Constantine Caramanis, Associate Professor Electrical and Computer Engineering PhD, Massachusetts Institute of Technology, 2006

Ben H Caudle, Professor Emeritus Petroleum and Geosystems Engineering PhD, University of Texas at Austin, 1963

Armand J Chaput, Senior Lecturer Aerospace Engineering and Engineering Mechanics PhD, Texas A & M University, 1966

Randall J Charbeneau, Professor Jewel McAlister Smith Professorship in Engineering Civil, Architectural, and Environmental Engineering PhD, Stanford University, 1978

William Charlton, Professor John J. McKetta Energy Professorship in Engineering Mechanical Engineering PhD, Texas A & M University, 1999

James R Chelikowsky, Professor W. A. "Tex" Moncrief, Jr. Chair in Computational Materials Chemical Engineering PhD, University of California-Berkeley, 1975

Dongmei Chen, Associate Professor Mechanical Engineering PhD, University of Michigan-Ann Arbor, 2006

Jingyi Chen, Assistant Professor Aerospace Engineering and Engineering Mechanics PhD, Stanford University, 2014

Ray T Chen, Professor Keys and Joan Curry/Cullen Trust Endowed Chair Electrical and Computer Engineering PhD, University of California-Irvine, 1991

Christian Claudel, Assistant Professor Civil, Architectural, and Environmental Engineering PhD, University of California-Berkeley, 2010

Patricia Clayton, Assistant Professor Civil, Architectural, and Environmental Engineering MSCE, University of Washington - Seattle, 2010

Noel T Clemens, Professor Cockrell Family Chair for Departmental Leadership #2, Bob R. Dorsey Professorship in Engineering Aerospace Engineering and Engineering Mechanics PhD, Stanford University, 1991

John F Cline, Lecturer Mechanical Engineering PhD, University of Texas at Austin, 2012

Thomas J Connolly, Lecturer Aerospace Engineering and Engineering Mechanics Mechanical Engineering

#### PhD, University of Texas at Austin, 2000

Lydia Maria Contreras, Associate Professor Chemical Engineering PhD, Cornell University, 2008

Richard L Corsi, Professor Cockrell Family Chair for Departmental Leadership #3, Joe J. King Chair of Engineering No. 2 Civil, Architectural, and Environmental Engineering PhD, University of California-Davis, 1989

Elizabeth Cosgriff-Hernandez, Professor L. B. (Preach) Meaders Professorship in Engineering Biomedical Engineering PhD, Case Western Reserve University, 2005

Brady R Cox, Associate Professor Civil, Architectural, and Environmental Engineering PhD, University of Texas at Austin, 2006

Harvey G Cragon, Professor Emeritus Electrical and Computer Engineering BSEE, Louisiana Tech University, 1950

Roy R Craig Jr, Professor Emeritus Aerospace Engineering and Engineering Mechanics PhD, University of Illinois at Urbana-Champaign, 1960

Michael E Crawford, Professor Emeritus Mechanical Engineering PhD, Stanford University, 1976

Richard H Crawford, Professor Mechanical Engineering PhD, Purdue University Main Campus, 1989

Alfonso Cuevas, Senior Lecturer Electrical and Computer Engineering PhD, University of Texas at Austin, 1990

Michael Arthur Cullinan, Assistant Professor Mechanical Engineering PhD, Massachusetts Institute of Technology, 2011

Adriana Costa Da Silveira, Adjunct Assistant Professor Biomedical Engineering PhD, University of Florida, 1998

Hugh C Daigle, Assistant Professor Petroleum and Geosystems Engineering PhD, Rice University, 2011

Walter K Daniel, Project Manager Aerospace Engineering and Engineering Mechanics MS, Georgia Institute of Technology, 1986

Clinton N Dawson, Professor John J. McKetta Centennial Energy Chair in Engineering Aerospace Engineering and Engineering Mechanics PhD, Rice University, 1988

Gustavo A De Veciana, Professor Cullen Trust for Higher Education Endowed Professorship in Engineering #2 Electrical and Computer Engineering PhD, University of California-Berkeley, 1993

Mojdeh Delshad, Research Professor (Affiliated)

Petroleum and Geosystems Engineering PhD, University of Texas at Austin, 1986

Leszek F Demkowicz, Professor W. A. "Tex" Moncrief, Jr. Chair in Computational Engineering and Sciences II Aerospace Engineering and Engineering Mechanics PhD, Cracow Univ of Technology, 1982

Brandi L DeMont, Lecturer Aerospace Engineering and Engineering Mechanics Biomedical Engineering PhD, University of Texas at Austin, 2010

Eric Pierre Derouffignac, Adjunct Professor Petroleum and Geosystems Engineering PhD, University of Texas at Austin, 1979

Ashish Deshpande, Associate Professor Mechanical Engineering PhD, University of Michigan-Ann Arbor, 2007

Luigi Dibiase, Adjunct Associate Professor Biomedical Engineering MD, University of Bari, 2000

David DiCarlo, Associate Professor Petroleum and Geosystems Engineering PhD, Cornell University, 1994

Kenneth R Diller, Professor Robert M. and Prudie Leibrock Endowed Professorship in Engineering Biomedical Engineering ScD, Massachusetts Institute of Technology, 1972

Georgios-Alex Dimakis, Associate Professor Electrical and Computer Engineering PhD, University of California-Berkeley, 2008

Birol Dindoruk, Professor Petroleum and Geosystems Engineering PhD, Stanford University, 1992

Brian Dinsmoor, Lecturer Chemical Engineering MS, University of Texas at Austin, 1979

Dragan Djurdjanovic, Associate Professor Mechanical Engineering PhD, University of Michigan-Ann Arbor, 2002

Ananth Dodabalapur, Professor Cullen Trust for Higher Education Endowed Professorship in Engineering #3 Electrical and Computer Engineering PhD, University of Texas at Austin, 1990

Ricardo H Dunia, Volunteer Chemical Engineering PhD, University of Texas at Austin, 1997

Andrew K Dunn, Professor Donald J. Douglass Centennial Professorship in Engineering Biomedical Engineering PhD, University of Texas at Austin, 1997

Mary V Eberlein, Senior Lecturer Electrical and Computer Engineering

#### PhD, University of Tennessee, 1996

Thomas F Edgar, Professor George T. and Gladys H. Abell Endowed Chair of Engineering Chemical Engineering PhD, Princeton University, 1971

Thomas A Edison, Lecturer Chemical Engineering PhD, University of Maryland College Park, 1998

John G Ekerdt, Professor Dick Rothwell Endowed Chair in Chemical Engineering Chemical Engineering PhD, University of California-Berkeley, 1979

Chadi Said El Mohtar, Associate Professor Civil, Architectural, and Environmental Engineering PhD, Purdue University Main Campus, 2008

Robert B Eldridge, Distinguished Senior Lecturer Chemical Engineering PhD, University of Texas at Austin, 1986

Zwy Eliezer, Professor Emeritus Mechanical Engineering DSc, Technion-Israel Institute of Technology, 1972

Janet L Ellzey, Professor Mechanical Engineering PhD, University of California-Berkeley, 1985

Stanislav Emelianov, Adjunct Professor Biomedical Engineering PhD, University of Moscow, 1992

Saeid Enayatpour, Lecturer Mechanical Engineering PhD, University of Texas at Austin, 2015

Michael D Engelhardt, Professor Adnan Abou-Ayyash Centennial Professorship in Transportation Engineering Civil, Architectural, and Environmental Engineering PhD, University of California-Berkeley, 1989

Mattan Erez, Associate Professor Electrical and Computer Engineering PhD, Stanford University, 2007

David N Espinoza, Assistant Professor Petroleum and Geosystems Engineering PhD, Georgia Institute of Technology, 2011

Brian L Evans, Professor Engineering Foundation Professorship Electrical and Computer Engineering PhD, Georgia Institute of Technology, 1993

Ofodike A Ezekoye, Professor W. R. Woolrich Professorship in Engineering Civil, Architectural, and Environmental Engineering Mechanical Engineering PhD, University of California-Berkeley, 1991

William F Fagelson, Lecturer Electrical and Computer Engineering PhD, University of Texas at Austin, 2004 Eric P Fahrenthold, Professor Mechanical Engineering PhD, Rice University, 1984

Donglei Fan, Associate Professor Mechanical Engineering PhD, Johns Hopkins University, 2007

Kasey M Faust, Assistant Professor Civil, Architectural, and Environmental Engineering PhD, Purdue University Main Campus, 2015

Marc D Feldman, Adjunct Professor Biomedical Engineering MD, University of Pennsylvania, 1981

Gregory L Fenves, Professor Cockrell Family Chair in Engineering #15, Regents Chair in Higher Education Leadership, Ed and Caroline Hyman Endowed Presidential Leadership Chair Civil, Architectural, and Environmental Engineering PhD, University of California-Berkeley, 1984

Benito Fernandez, Associate Professor Mechanical Engineering PhD, Massachusetts Institute of Technology, 1988

Paulo J Ferreira, Adjunct Professor Mechanical Engineering PhD, University of Illinois at Urbana-Champaign, 1996

Raissa Patricia Ferron, Associate Professor Civil, Architectural, and Environmental Engineering PhD, Northwestern University, 2008

Mark M Flynn, Lecturer Electrical and Computer Engineering PhD, University of Texas at Austin, 2003

Kevin J Folliard, Professor Civil, Architectural, and Environmental Engineering PhD, University of California-Berkeley, 1995

John Timothy Foster, Associate Professor Aerospace Engineering and Engineering Mechanics Petroleum and Geosystems Engineering PhD, Purdue University Main Campus, 2009

David W Fowler, Professor Emeritus Civil, Architectural, and Environmental Engineering PhD, University of Colorado at Boulder, 1965

Wallace T Fowler, Professor Emeritus Aerospace Engineering and Engineering Mechanics PhD, University of Texas at Austin, 1965

Douglas J Fox Jr, Adjunct Assistant Professor Biomedical Engineering MD, Washington University in St Louis, 1999

Karl H Frank, Professor Emeritus Civil, Architectural, and Environmental Engineering PhD, Lehigh University, 1972

Benny D Freeman, Professor Richard B. Curran Centennial Chair in Engineering Chemical Engineering PhD, University of California-Berkeley, 1988 Keith A Friedman, Senior Lecturer Chemical Engineering PhD, University of Texas at Austin, 2003

Richard W Furlong, Professor Emeritus Civil, Architectural, and Environmental Engineering PhD, University of Texas at Austin, 1963

Donald S Fussell, Professor Trammell Crow Regents Professorship in Computer Science Electrical and Computer Engineering PhD, University of Texas at Dallas, 1980

Venkat Ganesan, Professor Kenneth A. Kobe Professorship in Chemical Engineering Chemical Engineering PhD, Massachusetts Institute of Technology, 1999

Vijay K Garg, Professor Cullen Trust for Higher Education Endowed Professorship in Engineering #5 Electrical and Computer Engineering

PhD, University of California-Berkeley, 1988

James Gelb, Lecturer Mechanical Engineering PhD, Massachusetts Institute of Technology, 1992

George Georgiou, Professor Laura Jennings Turner Chair in Engineering Biomedical Engineering Chemical Engineering PhD, Cornell University, 1987

Hande Gerkus, Lecturer Civil, Architectural, and Environmental Engineering PhD, University of Texas at Austin, 2016

Andreas M Gerstlauer, Associate Professor Electrical and Computer Engineering PhD, University of California-Irvine, 2004

Ranjit Gharpurey, Professor Electrical and Computer Engineering PhD, University of California-Berkeley, 1995

Omar Ghattas, Professor John A. and Katherine G. Jackson Chair in Computational Geosciences Biomedical Engineering Mechanical Engineering PhD, Duke University, 1988

Joydeep Ghosh, Professor Schlumberger Centennial Chair in Electrical Engineering Electrical and Computer Engineering PhD, University of Southern California, 1988

Robert B Gilbert, Professor Brunswick-Abernathy Regents Professorship in Soil Dynamics and Geotechnical Engineering Civil, Architectural, and Environmental Engineering PhD, University of Illinois at Urbana-Champaign, 1993

Milos Gligoric, Assistant Professor Electrical and Computer Engineering PhD, University of Illinois at Urbana-Champaign, 2015

Earnest F Gloyna, Professor Emeritus Civil, Architectural, and Environmental Engineering DEng, Johns Hopkins University, 1953

David B Goldstein, Professor Hayden Head Centennial Professorship Aerospace Engineering and Engineering Mechanics PhD, California Institute of Technology, 1990

Anthony J Gonzales, Lecturer Civil, Architectural, and Environmental Engineering MSCE, University of Texas at Austin, 2009

Mario J Gonzalez, Professor Emeritus Electrical and Computer Engineering PhD, University of Texas at Austin, 1971

John B Goodenough, Professor Virginia H. Cockrell Centennial Chair in Engineering Electrical and Computer Engineering Mechanical Engineering PhD, University of Chicago, 1952

Mack Grady, Professor Emeritus Electrical and Computer Engineering PhD, Purdue University Main Campus, 1983

Kenneth E Gray, Professor Petroleum and Geosystems Engineering PhD, University of Texas at Austin, 1963

Derek A Haas, Assistant Professor Mechanical Engineering PhD, University of Texas at Austin, 2008

Michael R Haberman, Assistant Professor Mechanical Engineering PhD, Georgia Institute of Technology, 2007

Christopher C Hadlock, Lecturer Mechanical Engineering PhD, University of Texas at Austin, 2017

Matthew J Hall, Professor Mechanical Engineering PhD, Princeton University, 1987

Neal A Hall, Associate Professor Electrical and Computer Engineering PhD, Georgia Institute of Technology, 2004

Gary A Hallock, Professor Electrical and Computer Engineering PhD, Rensselaer Polytechnic Institute, 1982

Mark F Hamilton, Professor Harry L. Kent, Jr. Professorship in Mechanical Engineering Mechanical Engineering PhD, Pennsylvania State University Main Campus, 1983

Grani Adiwena Hanasusanto, Assistant Professor Mechanical Engineering PhD, Imperial College London, 2015

Raymond J Harshbarger III, Adjunct Professor Biomedical Engineering MD, University of Rochester, 1994

Hillary Hart, Distinguished Senior Lecturer Civil, Architectural, and Environmental Engineering PhD, Bryn Mawr College, 1981 John J Hasenbein, Professor Mechanical Engineering PhD, Georgia Institute of Technology, 1999

Noble Hatten, Research Associate Aerospace Engineering and Engineering Mechanics PhD, University of Texas at Austin, 2016

Byron Haynes Petroleum and Geosystems Engineering MS, University of Texas at Austin, 1988

Robert W Heath Jr, Professor Cullen Trust for Higher Education Endowed Professorship in Engineering #6 Electrical and Computer Engineering PhD, Stanford University, 2002

Robert E Hebner, Research Professor Mechanical Engineering PhD, University of Missouri - Rolla, 1971

Zoya Heidari, Assistant Professor Petroleum and Geosystems Engineering PhD, University of Texas at Austin, 2011

Adam Heller, Research Professor Chemical Engineering PhD, The Hebrew University of Jerusalem, 1961

Alexander J Heltzel, Lecturer Mechanical Engineering PhD, University of Texas at Austin, 2006

Todd A Helwig, Professor Civil, Architectural, and Environmental Engineering PhD, University of Texas at Austin, 1994

Deborah S Hempel-Medina, Lecturer Petroleum and Geosystems Engineering MBA, Southern Methodist University, 2001

Lea Hildebrandt Ruiz, Assistant Professor Chemical Engineering PhD, Carnegie Mellon University, 2011

Ben R Hodges, Associate Professor Civil, Architectural, and Environmental Engineering PhD, Stanford University, 1997

Edward R Holley, Professor Emeritus Civil, Architectural, and Environmental Engineering ScD, Massachusetts Institute of Technology, 1965

Rodney Horton, Adjunct Professor Biomedical Engineering MD, University of Texas Southwestern Medical Center at Dallas, 1988

John R Howell, Professor Emeritus Mechanical Engineering PhD, Case Western Reserve University, 1962

Trevor Daniel Hrynyk, Assistant Professor Civil, Architectural, and Environmental Engineering PhD, University of Toronto, 2013

Qin Huang, Professor Dula D. Cockrell Centennial Chair in Engineering #1 Electrical and Computer Engineering PhD, University of Cambridge, 1992

Rui Huang, Professor Aerospace Engineering and Engineering Mechanics PhD, Princeton University, 2001

William R Hudson, Professor Emeritus Civil, Architectural, and Environmental Engineering PhD, University of Texas at Austin, 1965

Thomas J Hughes, Professor Peter O'Donnell, Jr. Chair in Computational and Applied Mathematics Aerospace Engineering and Engineering Mechanics PhD, University of California-Berkeley, 1974

David G Hull, Professor Emeritus Aerospace Engineering and Engineering Mechanics PhD, Rice University, 1967

Todd E Humphreys, Associate Professor Aerospace Engineering and Engineering Mechanics PhD, Cornell University, 2008

Gyeong S Hwang, Professor Paul D. and Betty Robertson Meek and American Petrofina Foundation Centennial Professorship in Chemical Engineering Chemical Engineering PhD, California Institute of Technology, 1999

Jang-Hi Im Mechanical Engineering ScD, Massachusetts Institute of Technology, 1976

Jean Incorvia, Assistant Professor Electrical and Computer Engineering PhD, Harvard University, 2015

Marcia Isakson, Lecturer Mechanical Engineering PhD, University of Texas at Austin, 2002

Moriba Jah, Associate Professor Aerospace Engineering and Engineering Mechanics PhD, University of Colorado at Boulder, 2005

Vijay Janapa Reddi, Associate Professor Electrical and Computer Engineering PhD, Harvard University, 2010

Ning Jiang, Assistant Professor Biomedical Engineering PhD, Georgia Institute of Technology, 2005

James O Jirsa, Professor Emeritus Civil, Architectural, and Environmental Engineering PhD, University of Illinois at Urbana-Champaign, 1963

Lizy K John, Professor B. N. Gafford Professorship in Electrical Engineering Electrical and Computer Engineering PhD, Pennsylvania State University Main Campus, 1993

Blair Johnson, Assistant Professor Civil, Architectural, and Environmental Engineering PhD, Cornell University, 2016

Keith P Johnston, Professor M. C. (Bud) and Mary Beth Baird Endowed Chair Chemical Engineering

## PhD, University of Illinois at Urbana-Champaign, 1981

Brandon A Jones, Assistant Professor Aerospace Engineering and Engineering Mechanics PhD, University of Colorado at Boulder, 2010

Miguel Jose-Yacaman, Adjunct Professor Chemical Engineering PhD, Nat University of Mexico, 1973

Maria G Juenger, Professor Civil, Architectural, and Environmental Engineering PhD, Northwestern University, 1999

Christine L Julien, Professor Annis and Jack Bowen Endowed Professorship in Engineering Electrical and Computer Engineering DSc, Washington University in St Louis, 2004

Davor Juricic, Professor Emeritus Mechanical Engineering DSc, University of Belgrade, 1964

Moses A Kai, Lecturer Electrical and Computer Engineering PhD, University of Texas at Austin, 2012

Loukas F Kallivokas, Professor Civil, Architectural, and Environmental Engineering PhD, Carnegie Mellon University, 1995

Lynn E Katz, Professor Bettie Margaret Smith Professorship in Engineering Civil, Architectural, and Environmental Engineering PhD, University of Michigan-Ann Arbor, 1993

Fayez S Kazi, Lecturer Civil, Architectural, and Environmental Engineering MSE, University of Texas at Austin, 2001

Keith Keitz, Assistant Professor Chemical Engineering PhD, California Institute of Technology, 2013

Patrick K Kelley, Adjunct Associate Professor Biomedical Engineering MD, Baylor College of Medicine, 1998

Alireza Khademhosseini, Adjunct Associate Professor Biomedical Engineering PhD, Massachusetts Institute of Technology, 2005

Sarfraz Khurshid, Professor Electrical and Computer Engineering PhD, Massachusetts Institute of Technology, 2004

Hyun Jung Kim, Assistant Professor Biomedical Engineering PhD, Yonsei University, 2005

Cynthia J King, Lecturer Civil, Architectural, and Environmental Engineering PhD, Arizona State University Main, 2012

Spyridon A Kinnas, Professor Civil, Architectural, and Environmental Engineering PhD, Massachusetts Institute of Technology, 1985

Kerry A Kinney, Professor L. P. Gilvin Centennial Professorship in Civil Engineering Civil, Architectural, and Environmental Engineering PhD, University of California-Davis, 1996

Mary Jo Kirisits, Associate Professor Civil, Architectural, and Environmental Engineering PhD, University of Illinois at Urbana-Champaign, 2000

Dale E Klein, Professor Frank and Kay Reese Endowed Professorship in Engineering Mechanical Engineering PhD, University of Missouri - Columbia, 1977

Joshua B Klenzendorf, Lecturer Civil, Architectural, and Environmental Engineering PhD, University of Texas at Austin, 2010

Richard E Klingner, Professor Emeritus Civil, Architectural, and Environmental Engineering PhD, University of California-Berkeley, 1977

Kara Kockelman, Professor DeWitt C. Greer Centennial Professorship in Transportation Engineering Civil, Architectural, and Environmental Engineering PhD, University of California-Berkeley, 1998

Billy V Koen, Professor Emeritus Mechanical Engineering ScD, Massachusetts Institute of Technology, 1968

Joseph H Koo, Lecturer Mechanical Engineering ScD, George Washington University, 1987

Seungbum Koo, Lecturer Civil, Architectural, and Environmental Engineering PhD, University of Texas at Austin, 2017

Brian A Korgel, Professor Edward S. Hyman Endowed Chair in Engineering, T. Brockett Hudson Professorship in Chemical Engineering Chemical Engineering PhD, University of California-Los Angeles, 1997

Desiderio Kovar, Professor E. C. H. Bantel Professorship for Professional Practice Mechanical Engineering PhD, Carnegie Mellon University, 1995

Thomas J Krueger, Senior Lecturer Mechanical Engineering PhD, Texas A & M University, 1975

Jaydeep Prakash Kulkarni, Assistant Professor Electrical and Computer Engineering PhD, Purdue University Main Campus, 2009

Kirby A Kuntz, Lecturer Civil, Architectural, and Environmental Engineering PhD, Pennsylvania State University Main Campus, 1994

Erhan Kutanoglu, Associate Professor Mechanical Engineering PhD, Lehigh University, 1999

Stelios Kyriakides, Professor John Webb Jennings Chair in Engineering Aerospace Engineering and Engineering Mechanics PhD, California Institute of Technology, 1980 Larry W Lake, Professor Shahid and Sharon Ullah Endowed Chair in Petroleum and Geosystems Engineering Petroleum and Geosystems Engineering PhD, Rice University, 1973

Simon S Lam, Professor Regents Chair in Computer Sciences #1 Electrical and Computer Engineering PhD, University of California-Los Angeles, 1974

Jamie P Lamb Jr, Professor Emeritus Mechanical Engineering PhD, University of Illinois at Urbana-Champaign, 1961

Chad M Landis, Professor M. J. Thompson Regents Professorship in Aerospace Engineering and Engineering Mechanics Aerospace Engineering and Engineering Mechanics PhD, University of California-Santa Barbara, 1999

Sheldon Landsberger, Professor Texas Atomic Energy Research Foundation Professorship in Engineering Mechanical Engineering PhD, University of Toronto, 1982

Desmond F Lawler, Professor Nasser I. Al-Rashid Chair in Civil Engineering Civil, Architectural, and Environmental Engineering PhD, University of North Carolina at Chapel Hill, 1980

Clyde E Lee, Professor Emeritus Civil, Architectural, and Environmental Engineering PhD, University of California-Berkeley, 1962

Jack C Lee, Professor Cullen Trust for Higher Education Endowed Professorship in Engineering #4 Electrical and Computer Engineering PhD, University of California-Berkeley, 1988

Benjamin D Leibowicz, Assistant Professor Mechanical Engineering PhD, Stanford University, 2016

Fernanda L Leite, Associate Professor Civil, Architectural, and Environmental Engineering DPhil, Carnegie Mellon University, 2009

Marsha Jane Lewis, Lecturer Chemical Engineering PhD, University of Texas at Austin, 2010

Wei Li, Professor Mechanical Engineering PhD, University of Michigan-Ann Arbor, 1999

Kenneth M Liechti, Professor Zarrow Centennial Professorship in Engineering Aerospace Engineering and Engineering Mechanics PhD, California Institute of Technology, 1980

Howard M Liljestrand, Professor Gerard A. Rohlich Regents Professorship in Civil Engineering Civil, Architectural, and Environmental Engineering PhD, California Institute of Technology, 1980

Chao Liu, Lecturer Mechanical Engineering PhD, University of Texas at Austin, 2016

Yuanyue Liu, Assistant Professor Mechanical Engineering PhD, Rice University, 2014

Douglas R Lloyd, Professor Emeritus Chemical Engineering PhD, University of Waterloo, 1977

Raymond C Loehr, Professor Emeritus Civil, Architectural, and Environmental Engineering PhD, University of Wisconsin-Madison, 1961

Raul G Longoria, Professor Mechanical Engineering PhD, University of Texas at Austin, 1989

Nanshu Lu, Associate Professor Aerospace Engineering and Engineering Mechanics Biomedical Engineering PhD, Harvard University, 2009

Lan Luan, Research Assistant Professor (Affiliated) Biomedical Engineering PhD, Stanford University, 2011

Nathaniel Lynd, Assistant Professor Chemical Engineering PhD, University of Minnesota-Twin Cities, 2007

Randy B Machemehl, Professor Nasser I. Al-Rashid Centennial Professorship in Transportation Engineering Civil, Architectural, and Environmental Engineering PhD, University of Texas at Austin, 1975

Raghavendran Mahalingam, Lecturer Aerospace Engineering and Engineering Mechanics PhD, Georgia Institute of Technology, 1999

David R Maidment, Professor Hussein M. Alharthy Centennial Chair in Civil Engineering Civil, Architectural, and Environmental Engineering PhD, University of Illinois at Urbana-Champaign, 1976

Krishan A Malik, Adjunct Professor Petroleum and Geosystems Engineering PhD, University of Texas at Austin, 1987

Filippo Mangolini, Assistant Professor Mechanical Engineering PhD, Universitat Zurich, 2011

Arumugam Manthiram, Professor Cockrell Family Regents Chair in Engineering #7 Mechanical Engineering PhD, Indian Institute of Technology - Chennai, 1980

Lance Manuel, Professor T. U. Taylor Professorship in Engineering Civil, Architectural, and Environmental Engineering PhD, Stanford University, 1993

Harris L Marcus, Professor Emeritus Mechanical Engineering PhD, Northwestern University, 1966

Hans M Mark, Professor Emeritus

Aerospace Engineering and Engineering Mechanics PhD, Massachusetts Institute of Technology, 1954

Mia K Markey, Professor Biomedical Engineering PhD, Duke University, 2001

Kurt M Marshek, Professor Emeritus Mechanical Engineering PhD, Ohio State U Main Campus,

Glenn Y Masada, Professor Mechanical Engineering ScD, Massachusetts Institute of Technology, 1980

Ronald D Matthews, Professor Mechanical Engineering PhD, University of California-Berkeley, 1977

Jennifer A Maynard, Associate Professor Chemical Engineering PhD, University of Texas at Austin, 2002

Robert B McCann Civil, Architectural, and Environmental Engineering Electrical and Computer Engineering PhD, University of Texas at Austin, 1975

Mark W McDermott, Executive in Residence Electrical and Computer Engineering PhD, University of Texas at Austin, 2014

John J McKetta Jr, Professor Emeritus Chemical Engineering PhD, University of Michigan-Ann Arbor, 1946

Daene C McKinney, Professor W.A. (Bill) Cunningham Professorship Civil, Architectural, and Environmental Engineering PhD, Cornell University, 1990

Mark E Mear, Professor Aerospace Engineering and Engineering Mechanics PhD, Harvard University, 1986

Fatima A Merchant, Adjunct Associate Professor Biomedical Engineering PhD, University of Texas at Austin, 1995

Robert M Metcalfe, Professor Electrical and Computer Engineering PhD, Harvard University, 1973

Delia Milliron, Professor Henry Beckman Professorship in Chemical Engineering Chemical Engineering PhD, University of California-Berkeley, 2004

Thomas E Milner, Professor The Joe King Professorship Biomedical Engineering Electrical and Computer Engineering PhD, University of Arizona, 1991

Kishore Mohanty, Professor Bank of America Centennial Professorship in Petroleum Engineering Petroleum and Geosystems Engineering PhD, University of Minnesota-Duluth, 1981 Tessie J Moon, Professor Mechanical Engineering PhD, University of Illinois at Urbana-Champaign, 1989

Christy Moore, Senior Lecturer Mechanical Engineering MA, University of Texas at Austin, 1990

Robert D Moser, Professor W. A. "Tex" Moncrief, Jr. Chair in Computational Engineering and Sciences Mechanical Engineering PhD, Stanford University, 1984

Charles B Mullins, Professor Z. D. Bonner Professorship of Chemical Engineering, Matthew Van Winkle Regents Professorship in Chemical Engineering Chemical Engineering PhD, California Institute of Technology, 1990

Juan Murcia Delso, Assistant Professor Civil, Architectural, and Environmental Engineering PhD, University of California-San Diego, 2013

Mustafa N Musta, Visiting Associate Professor Aerospace Engineering and Engineering Mechanics PhD, Southern Methodist University, 2012

Gyorgy Zoltan Nagy, Assistant Professor Civil, Architectural, and Environmental Engineering PhD, Swiss Federal Institute of Technology, 2011

Mohsen Nakhaeinejad, Lecturer Mechanical Engineering PhD, University of Texas at Austin, 2010

Vallath Nandakumar, Lecturer Electrical and Computer Engineering PhD, University of California-Berkeley, 1990

Dean P Neikirk, Professor Cullen Trust for Higher Education Endowed Professorship in Engineering #7 Electrical and Computer Engineering PhD, California Institute of Technology, 1984

Richard R Neptune, Professor Cockrell Family Chair for Departmental Leadership #4, John T. MacGuire Professorship in Mechanical Engineering Mechanical Engineering PhD, University of California-Davis, 1996

Quoc P Nguyen, Professor J. H. Herring Centennial Professorship in Petroleum Engineering Petroleum and Geosystems Engineering PhD, Delft University of Technology, 2004

Steven P Nichols, Professor Mechanical Engineering PhD, University of Texas at Austin, 1975

Evdokia Nikolova, Assistant Professor Electrical and Computer Engineering PhD, Massachusetts Institute of Technology, 2009

Atila Novoselac, Professor Civil, Architectural, and Environmental Engineering PhD, Pennsylvania State University Main Campus, 2004 Shannon B O'Brien, Lecturer Civil, Architectural, and Environmental Engineering PhD, University of Florida, 2007

William J O'Brien, Professor Civil, Architectural, and Environmental Engineering PhD, Stanford University, 1998

James T O'Connor, Professor C. T. Wells Professorship in Project Management Civil, Architectural, and Environmental Engineering PhD, University of Texas at Austin, 1983

J T Oden, Professor Cockrell Family Regents Chair in Engineering #2, Peter O'Donnell, Jr. Centennial Chair in Computing Systems Aerospace Engineering and Engineering Mechanics PhD, Oklahoma State University Main Campus, 1962

Ryosuke Okuno, Assistant Professor Petroleum and Geosystems Engineering PhD, University of Texas at Austin, 2009

Hilary C Olson, Lecturer Petroleum and Geosystems Engineering PhD, Stanford University, 1988

Jon E Olson, Professor Lois K. and Richard D. Folger Leadership Chair in Petroleum and Geosystems Engineering, Frank W. Jessen Professorship in Petroleum Engineering Petroleum and Geosystems Engineering PhD, Stanford University, 1991

Roy E Olson, Professor Emeritus Civil, Architectural, and Environmental Engineering PhD, University of Illinois at Urbana-Champaign, 1960

Raymond Lee Orbach, Professor Mechanical Engineering PhD, University of California-Berkeley, 1960

Michael E Orshansky, Professor Electrical and Computer Engineering PhD, University of California-Berkeley, 2001

Jeremiah F Palmer, Lecturer Aerospace Engineering and Engineering Mechanics PhD, University of Texas at Austin, 2015

Zhigang Pan, Professor Engineering Foundation Endowed Professorship #1 Electrical and Computer Engineering PhD, University of California-Los Angeles, 2000

Ronald L Panton, Professor Emeritus Mechanical Engineering PhD, University of California-Berkeley, 1966

Michael P Pappas, Lecturer Civil, Architectural, and Environmental Engineering PhD, University of Texas at Austin, 2004

Paola Passalacqua, Associate Professor Civil, Architectural, and Environmental Engineering PhD, University of Minnesota-Twin Cities, 2009

Yale N Patt, Professor Ernest Cockrell, Jr. Centennial Chair in Engineering Electrical and Computer Engineering PhD, Stanford University, 1966

Donald R Paul, Professor Ernest Cockrell, Sr. Chair in Engineering Chemical Engineering PhD, University of Wisconsin-Madison, 1965

Nicholas A Peppas, Professor Cockrell Family Regents Chair in Engineering #6 Biomedical Engineering Chemical Engineering ScD, Massachusetts Institute of Technology, 1973

Dewayne E Perry, Professor Emeritus Electrical and Computer Engineering PhD, Stevens Institute of Technology, 1978

Ekwere J Peters, Professor Emeritus Petroleum and Geosystems Engineering PhD, University of Alberta, 1979

Daniel L Peterson, Adjunct Professor Biomedical Engineering MD, University of Colorado at Boulder, 1988

Michael Ray Piana, Volunteer Chemical Engineering MBA, University of Texas at Austin, 1978

Jean-Philip Piquemal, Adjunct Professor Biomedical Engineering PhD, Universite de Paris VI, Pierre et Marie Curie, 2004

Michael E Poehl, Lecturer Chemical Engineering MBA, University of Houston, 1988

Gary A Pope, Professor Texaco Centennial Chair in Petroleum Engineering Petroleum and Geosystems Engineering PhD, Rice University, 1972

Edward J Powers Jr, Professor Emeritus Electrical and Computer Engineering PhD, Stanford University, 1965

Roger L Priebe, Senior Lecturer Electrical and Computer Engineering PhD, University of Texas at Austin, 1997

Masa Prodanovic, Associate Professor Petroleum and Geosystems Engineering PhD, New York University, 2005

Jorge A Prozzi, Professor Civil, Architectural, and Environmental Engineering PhD, University of California-Berkeley, 2001

Mitchell W Pryor, Lecturer Electrical and Computer Engineering Mechanical Engineering PhD, University of Texas at Austin, 2002

Daniel Puperi, Lecturer Biomedical Engineering PhD, Rice University, 2016

Michael Pyrcz, Associate Professor

Petroleum and Geosystems Engineering PhD, University of Alberta, 2004

Varun Rai, Associate Professor Mechanical Engineering PhD, Stanford University, 2008

Laxminarayan L Raja, Professor Robert L. Parker, Sr. Centennial Professorship in Engineering Aerospace Engineering and Engineering Mechanics PhD, University of Texas at Austin, 1996

D'Arcy C Randall, Senior Lecturer Chemical Engineering PhD, University of Texas at Austin, 2001

Ellen M Rathje, Professor Warren S. Bellows Centennial Professorship in Civil Engineering Civil, Architectural, and Environmental Engineering PhD, University of California-Berkeley, 1997

Manuel Karl Rausch, Assistant Professor Aerospace Engineering and Engineering Mechanics Biomedical Engineering PhD, Stanford University, 2013

Krishnaswa Ravi-Chandar, Professor Temple Foundation Endowed Professorship No. 1 Aerospace Engineering and Engineering Mechanics PhD, California Institute of Technology, 1982

Leonard F Register, Professor J. H. Herring Centennial Professorship in Engineering Electrical and Computer Engineering PhD, North Carolina State University, 1990

Pengyu Ren, Professor Biomedical Engineering PhD, University of Cincinnati Main Campus, 1999

Joshua D Rhodes, Lecturer Mechanical Engineering PhD, University of Texas at Austin, 2014

Gary T Rochelle, Professor Carol and Henry Groppe Professorship in Chemical Engineering Chemical Engineering PhD, University of California-Berkeley, 1977

Gregory J Rodin, Professor Aerospace Engineering and Engineering Mechanics PhD, Massachusetts Institute of Technology, 1986

Tomas M Rodriguez, Lecturer Civil, Architectural, and Environmental Engineering MS, University of Texas at Austin, 2009

Adrianne M Rosales, Assistant Professor Chemical Engineering PhD, University of California-Berkeley, 2013

Charles H Roth Jr, Professor Emeritus Electrical and Computer Engineering PhD, Stanford University, 1962

Juan P Ruiz, Other University Affiliate Chemical Engineering PhD, Carnegie Mellon University, 2011 Martin Glen Rumbaugh, Lecturer Civil, Architectural, and Environmental Engineering MS, University of Texas at Austin, 1998

Ryan P Russell, Associate Professor Aerospace Engineering and Engineering Mechanics PhD, University of Texas at Austin, 2004

Christopher G Rylander, Associate Professor Biomedical Engineering Mechanical Engineering PhD, University of Texas at Austin, 2005

Henry G Rylander III, Professor Harry H. Power Professorship in Engineering Biomedical Engineering Electrical and Computer Engineering MD, University of Texas Health Science Center at San Antonio, 1974

Marissa Nichole Rylander, Associate Professor Mechanical Engineering PhD, University of Texas at Austin, 2005

Michael S Sacks, Professor W. A. "Tex" Moncrief, Jr. Endowment in Simulation-Based Engineering and Sciences - Endowed Chair No. 1 Aerospace Engineering and Engineering Mechanics Biomedical Engineering Mechanical Engineering PhD, University of Texas at Arlington, 1992

Jason D Sagers, Lecturer Mechanical Engineering PhD, University of Texas at Austin, 2012

Chirag Sakhuja, Lecturer Electrical and Computer Engineering MS, University of Texas at Austin, 2017

Shelly Elese Sakiyama-Elbert, Professor Cockrell Family Chair for Departmental Leadership #1, Fletcher Stuckey Pratt Chair in Engineering Biomedical Engineering PhD, California Institute of Technology, 2000

Joseph C Salamone, Adjunct Professor Biomedical Engineering PhD, Polytechnic University, 1967

Salvatore Salamone, Assistant Professor Civil, Architectural, and Environmental Engineering PhD, Universita degli Studi di Palermo, 2007

Navid Saleh, Associate Professor Civil, Architectural, and Environmental Engineering PhD, Carnegie Mellon University, 2007

Isaac C Sanchez, Professor William J. (Bill) Murray, Jr. Endowed Chair of Engineering Chemical Engineering PhD, University of Delaware, 1969

Juan M Sanchez, Professor Temple Foundation Endowed Professorship No. 4 Mechanical Engineering PhD, University of California-Los Angeles, 1977

Irwin W Sandberg, Professor Emeritus Electrical and Computer Engineering

#### DEE, Polytechnic University, 1958

Sujay Sanghavi, Associate Professor Electrical and Computer Engineering PhD, University of Illinois at Urbana-Champaign, 2006

Surya Santoso, Professor Electrical and Computer Engineering PhD, University of Texas at Austin, 1996

Richard A Schapery, Professor Emeritus Aerospace Engineering and Engineering Mechanics PhD, California Institute of Technology, 1962

Erich A Schneider, Professor Mechanical Engineering PhD, Cornell University, 2002

Carolyn C Seepersad, Associate Professor Mechanical Engineering PhD, Georgia Institute of Technology, 2004

Polina Sela, Assistant Professor Civil, Architectural, and Environmental Engineering PhD, Technion-Israel Institute of Technology, 2011

Luis Sentis, Associate Professor Aerospace Engineering and Engineering Mechanics PhD, Stanford University, 2007

Kamy Sepehrnoori, Professor W. A. "Monty" Moncrief Centennial Chair in Petroleum Engineering Petroleum and Geosystems Engineering PhD, University of Texas at Austin, 1977

Amir Shahmoradi, Lecturer Aerospace Engineering and Engineering Mechanics PhD, University of Texas at Austin, 2015

Sanjay Shakkottai, Professor Ashley H. Priddy Centennial Professorship in Engineering Electrical and Computer Engineering PhD, University of Illinois at Urbana-Champaign, 2002

Mukul M Sharma, Professor W. A. "Tex" Moncrief, Jr. Centennial Chair in Petroleum Engineering Petroleum and Geosystems Engineering PhD, University of Southern California, 1985

Li Shi, Professor The BFGoodrich Endowed Professorship in Materials Engineering Mechanical Engineering PhD, University of California-Berkeley, 2000

Jayant Sirohi, Associate Professor Aerospace Engineering and Engineering Mechanics PhD, University of Maryland College Park, 2002

Richard W Smalling, Adjoint Professor Biomedical Engineering PhD, University of Texas Health Science Center at Houston, 1977

Mark J T Smith, Professor Electrical and Computer Engineering PhD, Georgia Institute of Technology, 1984

Michael H Smolensky, Adjunct Professor Biomedical Engineering PhD, University of Illinois at Urbana-Champaign, 1971 Konstantin V Sokolov, Adjunct Associate Professor Biomedical Engineering PhD, Moscow State University, 1992

David Soloveichik, Assistant Professor Electrical and Computer Engineering PhD, California Institute of Technology, 2008

Gerald E Speitel Jr, Professor C. W. Cook Professorship in Environmental Engineering Civil, Architectural, and Environmental Engineering PhD, University of North Carolina at Chapel Hill, 1985

S V Sreenivasan, Professor Joe C. Walter, Jr. Chair in Engineering Mechanical Engineering PhD, Ohio State U Main Campus, 1994

Jeanne Casstevens Stachowiak, Assistant Professor Biomedical Engineering PhD, University of California-Berkeley, 2008

Mark A Stadtherr, Research Professor Chemical Engineering PhD, University of Wisconsin-Madison, 1976

Karl D Stephan, Adjunct Associate Professor Electrical and Computer Engineering PhD, University of Texas at Austin, 1983

Morris Stern, Professor Emeritus Aerospace Engineering and Engineering Mechanics PhD, University of Illinois at Urbana-Champaign, 1962

James E Stice, Professor Emeritus Chemical Engineering PhD, Illinois Institute of Technology, 1963

Wesley W Stidham, Lecturer Civil, Architectural, and Environmental Engineering BSME, University of Texas at Austin, 1995

Kenneth H Stokoe II, Professor Jennie C. and Milton T. Graves Chair in Engineering Civil, Architectural, and Environmental Engineering PhD, University of Michigan-Ann Arbor, 1972

Ben G Streetman, Professor Emeritus Electrical and Computer Engineering PhD, University of Texas at Austin, 1966

Laura J Suggs, Professor Biomedical Engineering PhD, Rice University, 1998

James Samuel Sulzer, Assistant Professor Mechanical Engineering PhD, Northwestern University, 2009

Nan Sun, Associate Professor Electrical and Computer Engineering PhD, Harvard University, 2011

Earl E Swartzlander Jr, Professor Electrical and Computer Engineering PhD, University of Southern California, 1972

John S Swinnea, Lecturer Chemical Engineering PhD, University of Texas at Austin, 1981

Eric M Taleff, Professor Mechanical Engineering PhD, Stanford University, 1995

Takashi Tanaka, Assistant Professor Aerospace Engineering and Engineering Mechanics PhD, University of Illinois at Urbana-Champaign, 2012

Hu Tao, Assistant Professor Mechanical Engineering PhD, Boston University, 2010

Byron D Tapley, Professor Emeritus Aerospace Engineering and Engineering Mechanics PhD, University of Texas at Austin, 1960

John L Tassoulas, Professor Phil M. Ferguson Professorship in Civil Engineering Civil, Architectural, and Environmental Engineering PhD, Massachusetts Institute of Technology, 1981

Nina K Telang, Senior Lecturer Biomedical Engineering Electrical and Computer Engineering PhD, University of Notre Dame, 1995

David W Terreson, Adjunct Associate Professor Biomedical Engineering MD, University of Mississippi Medical Center, 1986

Delbert Tesar, Professor Emeritus Mechanical Engineering PhD, Georgia Institute of Technology, 1964

Ahmed Hossam Tewfik, Professor Cockrell Family Regents Chair in Engineering #1, Cockrell Family Chair for Departmental Leadership #5 Electrical and Computer Engineering ScD, Massachusetts Institute of Technology, 1987

Andrea Lockerd Thomaz, Associate Professor Electrical and Computer Engineering PhD, Massachusetts Institute of Technology, 2006

Edison Thomaz Jr, Research Assistant Professor Electrical and Computer Engineering PhD, Georgia Institute of Technology, 2016

Mohit Tiwari, Assistant Professor Electrical and Computer Engineering PhD, University of California-Santa Barbara, 2011

Ufuk Topcu, Assistant Professor Aerospace Engineering and Engineering Mechanics PhD, University of California-Berkeley, 2008

Carlos Torres-Verdin, Professor Brian James Jennings Memorial Endowed Chair in Petroleum and Geosystems Engineering Petroleum and Geosystems Engineering PhD, University of California-Berkeley, 1991

Nur A Touba, Professor Electrical and Computer Engineering PhD, Stanford University, 1996

Thomas M Truskett, Professor

Bill L. Stanley Endowed Leadership Chair in Chemical Engineering, Les and Sherri Stuewer Endowed Professorship in Chemical Engineering Chemical Engineering PhD, Princeton University, 2001

Richard L Tucker, Professor Emeritus Civil, Architectural, and Environmental Engineering PhD, University of Texas at Austin, 1963

James W Tunnell, Associate Professor Biomedical Engineering PhD, Rice University, 2002

David P Tuttle, Lecturer Mechanical Engineering PhD, University of Texas at Austin, 2015

Emanuel Tutuc, Associate Professor Electrical and Computer Engineering PhD, Princeton University, 2004

Timothy J Urban, Lecturer Aerospace Engineering and Engineering Mechanics PhD, University of Texas at Austin, 2000

Jonathan W Valvano, Professor Electrical and Computer Engineering PhD, Massachusetts Institute of Technology, 1981

Eric van Oort, Professor B. J. Lancaster Professorship in Petroleum Engineering Petroleum and Geosystems Engineering PhD, University of Amsterdam, 1990

Philip L Varghese, Professor Stanley P. Finch Centennial Professorship in Engineering Aerospace Engineering and Engineering Mechanics PhD, Stanford University, 1983

Haris Vikalo, Associate Professor Electrical and Computer Engineering PhD, Stanford University, 2003

Sriram Vishwanath, Professor Electrical and Computer Engineering PhD, Stanford University, 2004

T R Viswanathan, Research Professor Electrical and Computer Engineering PhD, University of Saskatchewan, 1964

Gary C Vliet, Professor Emeritus Mechanical Engineering PhD, Stanford University, 1962

Norman K Wagner, Associate Professor Emeritus Civil, Architectural, and Environmental Engineering PhD, University of Hawaii at Manoa, 1966

C Michael Walton, Professor Ernest H. Cockrell Centennial Chair in Engineering Civil, Architectural, and Environmental Engineering PhD, North Carolina State University, 1971

Junmin Wang, Professor Mechanical Engineering PhD, University of Texas at Austin, 2007

Yaguo Wang, Assistant Professor

Mechanical Engineering PhD, Purdue University Main Campus, 2011

Zheng Wang, Assistant Professor Electrical and Computer Engineering PhD, Stanford University, 2006

Daniel M Wasserman, Associate Professor Electrical and Computer Engineering PhD, Princeton University, 2004

Michael E Webber, Professor Josey Centennial Professorship in Energy Resources Mechanical Engineering PhD, Stanford University, 2001

Ashley J Welch, Professor Emeritus Biomedical Engineering PhD, Rice University, 1964

William F Weldon, Professor Emeritus Mechanical Engineering MS, University of Texas at Austin, 1970

Charles J Werth, Professor Bettie Margaret Smith Chair in Environmental Health Engineering Civil, Architectural, and Environmental Engineering PhD, Stanford University, 1997

Heidi R Westerfield Ross, Lecturer Civil, Architectural, and Environmental Engineering MSCE, University of Texas at Austin, 1993

John C Westkaemper, Professor Emeritus Aerospace Engineering and Engineering Mechanics PhD, University of Texas at Austin, 1967

Mary F Wheeler, Professor Ernest and Virginia Cockrell Chair in Engineering Aerospace Engineering and Engineering Mechanics Petroleum and Geosystems Engineering PhD, Rice University, 1971

James C Wiley, Lecturer Electrical and Computer Engineering PhD, University of Texas at Austin, 1974

Eric B Williamson, Professor Hussein M. Alharthy Centennial Professorship in Civil Engineering Civil, Architectural, and Environmental Engineering PhD, University of Illinois at Urbana-Champaign, 1996

Carlton G Willson, Professor Rashid Engineering Regents Chair Chemical Engineering PhD, University of California-Berkeley, 1974

Preston S Wilson, Professor Mechanical Engineering PhD, Boston University, 2002

Eugene H Wissler, Professor Emeritus Chemical Engineering PhD, University of Minnesota-Twin Cities, 1955

Billy H Wood, Senior Lecturer Mechanical Engineering MArch, Texas A & M University, 1977 Sharon L Wood, Professor Cockrell Family Chair in Engineering #14, Jack and Beverly Randall Dean's Chair for Excellence in Engineering, Cockrell Family Dean's Chair in Engineering Excellence, Dean's Chair for Excellence in Engineering Civil, Architectural, and Environmental Engineering PhD, University of Illinois at Urbana-Champaign, 1986

Herbert H Woodson, Professor Emeritus Electrical and Computer Engineering DSc, Massachusetts Institute of Technology, 1956

Stephen G Wright, Professor Emeritus Civil, Architectural, and Environmental Engineering PhD, University of California-Berkeley, 1969

Tracy A Wuster, Lecturer Electrical and Computer Engineering PhD, University of Texas at Austin, 2011

Chong Xie, Assistant Professor Biomedical Engineering PhD, Stanford University, 2011

Ying Xu, Associate Professor Civil, Architectural, and Environmental Engineering PhD, Virginia Polytechnic Institute and State University, 2009

Thomas Yankeelov, Professor W. A. "Tex" Moncrief, Jr. Chair in Computational Engineering and Sciences IV - Computational Oncology, W. A. "Tex" Moncrief, Jr. Chair in Computational Engineering and Sciences IV - Computational Oncology Biomedical Engineering PhD, State University of New York at Stony Brook, 2003

Hsin-Chih Yeh, Assistant Professor Biomedical Engineering PhD, Johns Hopkins University, 2008

Ramesh Yerraballi, Distinguished Senior Lecturer Electrical and Computer Engineering PhD, Old Dominion University, 1996

Ching-Hsie Yew, Professor Emeritus Aerospace Engineering and Engineering Mechanics PhD, University of California-Berkeley, 1962

Ali E Yilmaz, Associate Professor Electrical and Computer Engineering PhD, University of Illinois at Urbana-Champaign, 2005

Edward T Yu, Professor Judson S. Swearingen Regents Chair in Engineering Electrical and Computer Engineering PhD, California Institute of Technology, 1991

Guihua Yu, Assistant Professor Mechanical Engineering PhD, Harvard University, 2009

Joseph A Yura, Professor Emeritus Civil, Architectural, and Environmental Engineering PhD, Lehigh University, 1965

Ramin Zanbaghi, Lecturer Electrical and Computer Engineering PhD, Oregon State University, 2011

Renato Zanetti, Assistant Professor Aerospace Engineering and Engineering Mechanics

### PhD, University of Texas at Austin, 2007

Zhanmin Zhang, Professor Civil, Architectural, and Environmental Engineering PhD, University of Texas at Austin, 1996

Yuebing Zheng, Assistant Professor Mechanical Engineering PhD, Pennsylvania State University Park, 2010

Jianshi Zhou, Research Professor Mechanical Engineering PhD, Northeast Normal University, 1991

Hao Zhu, Assistant Professor Electrical and Computer Engineering PhD, University of Minnesota-Twin Cities, 2012

Janeta Zoldan, Assistant Professor Biomedical Engineering PhD, Technion-Israel Institute of Technology, 2004

Jorge G Zornberg, Professor Civil, Architectural, and Environmental Engineering PhD, University of California-Berkeley, 1994

# **College of Fine Arts Faculty**

The following faculty list represents those appointed in the 2018 spring semester.

Lee E Abraham, Associate Professor Emeritus Theatre and Dance Theatre and Dance MFA, California Institute of the Arts, 1977

Nanette Acosta, Lecturer Theatre and Dance BFA, DePaul University, 1990

Christopher O Adejumo, Associate Professor Art and Art History PhD, Ohio State U Main Campus, 1997

Donnie R Albert, Senior Lecturer Music MM, Southern Methodist University, 1975

Sarah B Aldridge, Technical Staff Assistant IV Theatre and Dance BFA, Boston University, 2002

Gregory D Allen, Professor Music MM, Peabody Institute of Johns Hopkins University, 1972

Byron P Almen, Associate Professor Music PhD, Indiana University at Bloomington, 1998

Megan Alrutz, Associate Professor Theatre and Dance PhD, Arizona State University Main, 2004

Charles O Anderson, Associate Professor Theatre and Dance MFA, Temple University, 2002

Kevin J Auer, Technical Staff Assistant III

Art and Art History MA, University of Texas at Austin, 2009

Michael Avila, Lecturer Theatre and Dance MA, University of Houston, 2014

Nicole Awai, Assistant Professor Art and Art History MFA, University of South Florida, 1996

Christina Bain, Associate Professor Art and Art History PhD, University of Georgia, 2001

Rebecca A Baltzer, Professor Emeritus Music PhD, Boston University, 1974

Alyson Beaton, Lecturer Art and Art History MFA, School of the Art Institute of Chicago, 2003

Andrea P Beckham, Senior Lecturer Theatre and Dance BA, University of Texas at Austin, 1986

Ronald Berry Jr, Lecturer Theatre and Dance BA, Earlham College and Earlham School of Religion, 1995

Alexander Birchler, Research Associate Art and Art History MFA, Nova Scotia College of Art and Design, 1992

William Bloodgood, Senior Lecturer Theatre and Dance MFA, Pennsylvania State University Park, 1990

Paul E Bolin, Professor Art and Art History PhD, University of Oregon, 1986

Paul A Bonin, Associate Professor Theatre and Dance PhD, University of Texas at Austin, 2006

Carl Booker, Lecturer Theatre and Dance MFA, University of Texas at Austin, 2011

Yvonne M Boudreaux, Lecturer Theatre and Dance MFA, University of Texas at Austin, 2007

Penny Rae-Sunshine Brandt, Lecturer Music PhD, University of Connecticut, 2017

Troy D Brauntuch, Professor Art and Art History BFA, California Institute of the Arts, 1975

Nathaniel O Brickens, Professor Music DMA, University of Texas at Austin, 1989

Andrew A Brownell, Assistant Professor Music

#### DMA, Guildhall School of Music and Drama, 2010

Steven L Bryant, Associate Professor Emeritus Music MM, Wichita State University, 1971

James W Buhler, Professor Music PhD, University of Pennsylvania, 1996

Thomas A Burritt, Professor Music DMA, Northwestern University, 2000

William S Bussey, Lecturer Theatre and Dance BFA, University of Wisconsin-Milwaukee, 1983

Jett Butler, Lecturer Art and Art History BArch, Texas Tech University, 1996

Miguel Campinho, Lecturer Music DMA, University of Hartford, 2015

Charlotte Canning, Professor Frank C. Erwin, Jr. Centennial Professorship in Drama Theatre and Dance PhD, University of Washington - Seattle, 1991

Sarah A Canright, Senior Lecturer Art and Art History BFA, School of the Art Institute of Chicago, 1964

Andrew I Carlson, Clinical Assistant Professor Theatre and Dance PhD, University of Illinois at Urbana-Champaign, 2011

Laquetta L Carpenter, Lecturer Theatre and Dance MFA, Pennsylvania State University Park, 2007

Charles Daniel Carson, Associate Professor Music PhD, University of Pennsylvania, 2008

Edward Chambers, Professor Art and Art History PhD, University of London, 1998

B G Chandler, Professor Music PhD, Indiana University at Bloomington, 1975

Stacey H Chang Art and Art History MS, Stanford University, 1998

Michael J Charlesworth, Professor Art and Art History PhD, The University of Kent, 1990

Lee R Chesney III, Associate Professor Art and Art History MFA, Indiana University at Bloomington, 1972

Daniel Ching, Senior Lecturer Music MMus, Cleveland Institute of Music, 1998

Barbara Chisholm, Lecturer Theatre and Dance BFA, The Catholic University of America, 1984

Pamela D Christian, Associate Professor Emeritus Theatre and Dance Theatre and Dance PhD, Southern Illinois University, 2000

John R Clarke, Professor Annie Laurie Howard Regents Professorship in Fine Arts Art and Art History PhD, Yale University, 1973

Jesse Andrew Cline, Lecturer Art and Art History MFA, University of Texas at Austin, 2016

Rusty Cloyes, Senior Lecturer Theatre and Dance MFA, University of Texas at Austin, 2005

Michael Cohen, Lecturer Theatre and Dance MEd, University of Toronto, 1999

Thelma R Coles, Professor Emeritus Art and Art History MA, San Diego State University, 1978

Eric Joseph Colleary, Lecturer Theatre and Dance PhD, University of Minnesota-Twin Cities, 2014

Anna Collette, Assistant Professor Art and Art History MFA, Yale University, 2003

Anthony Creeden, Lecturer Art and Art History MFA, University of Texas at Austin, 2017

Paula A Crider, Professor Emeritus Music MM, University of Texas at Austin, 1970

Jeremy L Cudd, Lecturer Theatre and Dance MFA, Pennsylvania State University Park, 2007

Tina Marie Curran, Clinical Assistant Professor Theatre and Dance PhD, New York University, 2010

Stephen J Daly, Professor Emeritus Art and Art History MFA, Cranbrook Academy of Art, 1967

Penelope J Davies, Professor Art and Art History PhD, Yale University, 1994

Christin Sawyer Davis, Lecturer Theatre and Dance MFA, American Conservatory Theater, 2007

Kathryn M Dawson, Assistant Professor Theatre and Dance

### MFA, University of Texas at Austin, 2006

Andrew F Dell'Antonio, Professor Music PhD, University of California-Berkeley, 1991

Douglas J Dempster, Professor Effie Marie Cain Regents Chair in Fine Arts, The Marie and Joseph D. Jamail, Sr. Regents Professorship in Fine Arts Theatre and Dance PhD, University of North Carolina at Chapel Hill, 1983

Robert A Desimone, Professor Sarah and Ernest Butler Professorship in Opera Music DMA, University of Washington - Seattle, 1981

Hanns-Bertold Dietz, Professor Emeritus Music PhD, University of Innsbruck, 1956

Steven Dietz, Professor Theater for Youth Chair Theatre and Dance BA, University of Northern Colorado, 1980

Franchelle Dorn, Professor Virginia L. Murchison Regents Professorship in Fine Arts Theatre and Dance MFA, Yale University, 1975

Lara Rose Dossett, Administrative Program Coordinator Theatre and Dance MFA, University of Texas at Austin, 2014

Lucien Douglas, Associate Professor Theatre and Dance PhD, Michigan State University, East Lansing, 1996

Kathryn Lynn Dreier, Lecturer Art and Art History BFA, Pratt Institute, 2009

Eric A Drott, Associate Professor Music PhD, Yale University, 2001

Robert A Duke, Professor Marlene and Morton Meyerson Centennial Professorship in Music Music PhD, Florida State University, 1983

Rachel N Durkin-Drga, Lecturer Theatre and Dance MFA, University of Illinois at Urbana-Champaign, 1991

John E Durst, Lecturer Art and Art History MFA, Yale University, 2016

William A Edwards, Lecturer Music MM, University of Texas at Austin, 1989

Jeff W Ellinger, Lecturer Theatre and Dance BA, University of Texas at Austin, 1977

Bernard B Engel, Professor Emeritus

Theatre and Dance PhD, University of Pittsburgh, Pittsburgh Campus, 1967

Elizabeth Engelman, Lecturer Theatre and Dance MFA, Columbia University in the City of New York, 1996

Veit F Erlmann, Professor History of Music Chair Music PhD, University of Cologne, 1978

William A Fedkenheuer, Senior Lecturer Music BM, Rice University, 1998

Howard L Fine, Lecturer Theatre and Dance PhD, Rhode Island College, 2008

Eliot Fisher, Lecturer Theatre and Dance MFA, Goddard College, 2015

George F Flaherty, Associate Professor Art and Art History PhD, University of California-Santa Barbara, 2010

Robert Freeman, Professor Emeritus Music PhD, Princeton University, 1967

John M Fremgen, Associate Professor Music MMus, University of Southern California, 1993

George A Frock, Professor Emeritus Music MME, University of Kansas Main Campus, 1963

Joshua Gall, Lecturer Music MM, University of Florida, 2014

Nancy B Garrett, Professor Emeritus Music MM, University of Texas at Austin, 1966

Christine Garvey, Lecturer Art and Art History MFA, Concordia University, Montreal, 2015

Marianne Gedigian, Professor Sarah and Ernest Butler Professorship in Music Music BM, Boston University, 1986

Sophia Gilmson, Associate Professor Music Diploma (Artist), Saint Petersburg State Conservatory, 1973

Joshua T Gindele, Senior Lecturer Music BMus, The Juilliard School, 2000

Erica Lynn Gionfriddo, Lecturer Theatre and Dance BFA, Shenandoah University, 2006

James J Glavan, Professor

David Bruton, Jr. Regents Professorship in Fine Arts Theatre and Dance MA, Kent State University Main Campus, 1984

Jason A Goldstein, Lecturer Art and Art History PhD, University of Texas at Austin, 2017

Mark K Goodman, Professor Emeritus Art and Art History BA, Boston University, 1970

Donald J Grantham, Professor Frank C. Erwin, Jr. Centennial Professorship in Music Music DMA, University of Southern California, 1980

John W Grubbs, Associate Professor Emeritus Music PhD, University of California-Los Angeles, 1972

Julia E Guernsey, Professor Art and Art History PhD, University of Texas at Austin, 1997

Lita A Guerra, Professor Emeritus Music MM, University of Texas at Austin, 1959

Jonathan F Gunn, Assistant Professor Music MM, Duquesne University, 1997

Michelle Habeck, Associate Professor Theatre and Dance MFA, Northwestern University, 1996

Kenneth J Hale, Professor Emeritus Art and Art History MFA, University of Illinois at Urbana-Champaign, 1973

Scott S Hanna, Senior Lecturer Music DMA, University of Texas at Austin, 1999

Lorenzo Rennie Harris, Senior Lecturer Theatre and Dance PhD, Columbia College Chicago, 2013

Paul P Hatgil, Professor Emeritus Art and Art History MA, Columbia University in the City of New York, 1951

Robert S Hatten, Professor Marlene and Morton Meyerson Professorship in Music Music PhD, Indiana University at Bloomington, 1982

Amy Hauft, Professor Leslie Waggener Professorship in the College of Fine Arts Art and Art History MFA, School of the Art Institute of Chicago, 1983

Ryan Taylor Hawk, Lecturer Art and Art History MFA, University of Texas at Austin, 2017

Millie C Heckler, Lecturer Theatre and Dance BFA, University of Colorado at Boulder, 2015

Jeffrey L Hellmer, Professor Priscilla Pond Flawn Regents Professorship in Organ or Piano Performance Music MM, University of Rochester, 1983

Linda D Henderson, Professor David Bruton, Jr. Centennial Professorship in Art History Art and Art History PhD, Yale University, 1975

Rebecca Henderson, Professor Emeritus Music MM, University of Rochester, 1986

Timothy G High, Associate Professor Art and Art History MFA, University of Wisconsin-Madison, 1976

Martha F Hilley, Professor Music MA, Sam Houston State University, 1971

Joan A Holladay, Professor Art and Art History PhD, Brown University, 1982

Adam Holzman, Professor Parker C. Fielder Regents Professorship in Music Music MM, Florida State University, 1984

Teresa Hubbard, Professor William and Bettye Nowlin Endowed Professorship in Photography Art and Art History MFA, Nova Scotia College of Art and Design, 1992

Patrick Hughes, Associate Professor Music MMus, University of Wisconsin-Madison, 1988

Zachery Ingram, Lecturer Art and Art History MFA, University of Texas at Austin, 2017

Richard M Isackes, Professor Joanne Sharp Crosby Regents Chair in Design and Technology Theatre and Dance MFA, Carnegie Mellon University, 1975

Judith A Jellison, Professor Mary D. Bold Regents Professorship of Music Music PhD, Florida State University, 1972

Coleman A Jennings, Professor Emeritus Theatre and Dance EdD, New York University, 1974

Kristin Wolfe Jensen, Professor Music MM, The Juilliard School, 1991

Ann C Johns, Distinguished Senior Lecturer Art and Art History PhD, University of Texas at Austin, 2000 J E Johnson, Lecturer Theatre and Dance BA, Bethel College, 1996

Omi Osun Joni L Jones, Professor Theatre and Dance PhD, New York University, 1993

Jerry F Junkin, Professor Music MMus, University of Texas at Austin, 1979

Janet E Kastner, Associate Professor Emeritus Art and Art History MFA, Alfred University, 1979

Ryan S Kelly, Lecturer Music DMA, University of Texas at Austin, 2014

Nancy K Koenning, Lecturer Theatre and Dance MM, University of Texas at Austin, 1983

Karl Korte, Professor Emeritus Music MS, The Juilliard School, 1956

Stefan M Kostka, Professor Emeritus Music PhD, University of Wisconsin-Madison, 1969

Kelly Kuo, Lecturer Music MM, Manhattan School of Music, 1998

John C Largess, Senior Lecturer Music BA, Yale University, 1995

Joan Lazarus, Professor Emeritus Theatre and Dance MFA, Arizona State University Main, 1982

Delaine E Leonard, Senior Lecturer Music MMus, University of Texas at Austin, 1984

Janice Leoshko, Associate Professor Art and Art History PhD, Ohio State U Main Campus, 1987

Brian D Lewis, Professor David and Mary Winton Green Chair in String Performance and Pedagogy Music MM, The Juilliard School, 1993

Hannah Lewis, Assistant Professor Music PhD, Harvard University, 2014

William L Lewis, Professor Frank C. Erwin, Jr. Centennial Professorship in Opera Music BM, Texas Christian University, 1967

Alicia L Link, Lecturer Art and Art History MFA, University of Texas at Austin, 2017 Samuel M Lipman, Lecturer Theatre and Dance MM, University of Texas at Austin, 2017

Rina Kundu Little, Lecturer Art and Art History PhD, Ohio State U Main Campus, 2008

Beili Liu, Professor Art and Art History MFA, University of Michigan-Ann Arbor, 2003

Sondra Lomax, Lecturer Theatre and Dance MFA, York College, 1979

Beto Lopez Art and Art History MS, University of Texas at Austin, 2002

Marie Lorenz, Lecturer Art and Art History MFA, Yale University, 2002

Doreen Lorenzo Art and Art History MS, Boston University, 1981

Allison Elizabeth Lowery, Technical Staff Assistant IV Theatre and Dance MFA, North Carolina School of the Arts, 1999

Kristin Lucas, Assistant Professor Art and Art History MFA, Stanford University, 2006

Amarante L Lucero, Professor Emeritus Theatre and Dance MFA, Southern Methodist University, 1976

William A Lundberg, Professor Emeritus Art and Art History MA, University of California-Berkeley, 1965

Kirk E Lynn, Associate Professor Theatre and Dance MFA, University of Texas at Austin, 2004

Betty P Mallard, Associate Professor Emeritus Music DMA, University of Texas at Austin, 1979

Karen L Maness, Lecturer Theatre and Dance BA, Whittier College, 1995

Hunter C March, Professor Emeritus Music PhD, University of Michigan-Ann Arbor, 1980

Vincent A Mariani, Professor Emeritus Art and Art History BFA, Yale University, 1959

Cari E McDonnell, Lecturer Music PhD, University of Texas at Austin, 2015

Lawrence D McFarland, Professor Emeritus Art and Art History

#### MFA, University of Nebraska - Lincoln, 1976

Maurie McInnis, Professor Jacob and Frances Sanger Mossiker Chair in the Humanities #1 Art and Art History PhD, Yale University, 1996

Bethany S McLemore, Lecturer Music PhD, University of Texas at Austin, 2016

Richard E McMaster, Lecturer Art and Art History MFA, Arizona State University Main, 2008

Jeffrey L Meikle, Professor Stiles Professorship in American Studies Art and Art History PhD, University of Texas at Austin, 1977

Zachary Richard Meisner, Technical Staff Assistant III Art and Art History MFA, University of Texas at Austin, 2017

Robert W Melton, Lecturer Art and Art History MFA, University of Texas at Austin, 2010

Susan E Mickey, Professor Susan Menefee Ragan Regents Professorship in Fine Arts Theatre and Dance MFA, The University of Alabama, 1979

Amissa K Miller, Lecturer Theatre and Dance MFA, Columbia University in the City of New York, 2009

Ann B Miller, Lecturer Art and Art History MFA, University of Texas at Austin, 2016

Bucky Miller, Lecturer Art and Art History MFA, University of Texas at Austin, 2017

Melissa W Miller, Associate Professor Emeritus Art and Art History BA, New Mexico State University Main Campus, 1974

Adam Miller-Batteau, Lecturer Theatre and Dance MFA, University of Exeter, 2012

John R Mills, Professor Music DMA, University of Texas at Austin, 1998

Michael J Mogavero, Associate Professor Art and Art History MFA, Maryland Institute College of Art, 1975

Kevin Edward Mooney, Lecturer Music PhD, University of Texas at Austin, 1998

Robin D Moore, Professor Music PhD, University of Texas at Austin, 1995

Cynthia C Morrow, Lecturer

Music DMA, Ohio State U Main Campus, 1989

James M Morrow Jr, Associate Professor Music DMA, University of Texas at Austin, 1996

Michael J Muelhaupt, Technical Staff Assistant III Art and Art History MFA, University of Texas at Austin, 2017

Stephennie Mulder, Associate Professor Art and Art History PhD, University of Pennsylvania, 2008

Elisabeth R Murphy, Lecturer Art and Art History MAEd, Texas Tech University, 2008

Leslie A Mutchler, Associate Professor Art and Art History MFA, Temple University, 2004

Roger E Myers, Professor Music MM, University of Southern California, 1992

David A Nancarrow, Professor Emeritus Theatre and Dance PhD, University of Birmingham, 1975

Luisa Nardini, Associate Professor Music PhD, Universita degli Studi di Roma La Sapienza, 2001

Lana C Neal, Lecturer Music PhD, University of Texas at Austin, 2013

Anton Nel, Professor Joe R. & Teresa Lozano Long Chair in Piano Music MMus, University of Cincinnati Main Campus, 1984

Adele E Nelson, Assistant Professor Art and Art History PhD, New York University, 2012

David P Neumeyer, Professor Emeritus Music PhD, Yale University, 1976

Moyosore Benjamin Okediji, Professor Art and Art History PhD, University of Wisconsin Colleges, 1995

Guido Olivieri, Senior Lecturer Music PhD, University of California-Santa Barbara, 2005

Sandra E Organ, Lecturer Theatre and Dance BA, Antioch College, 2016

Sven Ortel, Lecturer Theatre and Dance BA, Rose Bruford College of Theatre and Performance, 2001

Francie Ostrower, Professor Theatre and Dance

#### PhD, Yale University, 1991

Dorothy Oshea Overbey, Lecturer Theatre and Dance BFA, Southern Methodist University, 1999

Stephen C Page, Assistant Professor Music DMA, University of Iowa, 2011

Athanasio Papalexandrou, Associate Professor Art and Art History PhD, Princeton University, 1998

Joonho Park, Assistant Professor Music MM, State University of Music and Performing Arts Stuttgart, 2010

Andrew A Parker, Assistant Professor Music DMA, University of Michigan-Ann Arbor, 2009

Sara L Paul, Lecturer Theatre and Dance BA, University of Texas at Austin, 2012

Gordon B Peacock, Professor Emeritus Theatre and Dance MFA, Carnegie Mellon University, 1952

Glenn A Peers, Professor Art and Art History PhD, Johns Hopkins University, 1996

Suzanne M Pence, Associate Professor Music DMA, University of Missouri - Kansas City, 1992

Monica M Penick Art and Art History PhD, University of Texas at Austin, 2007

Bruce W Pennycook, Professor Music DMA, Stanford University, 1978

Carolina Perez, Lecturer Theatre and Dance MFA, University of North Carolina School of the Arts, 2008

Jose Manuel Perez, Technical Staff Assistant IV Art and Art History MFA, University of Texas at Austin, 2015

Bogdan P Perzynski, Professor Art and Art History MFA, Poznan Academy of Fine Arts, 1979

Bradley R Petersen, Associate Professor Emeritus Art and Art History MFA, University of Georgia, 1975

Russell F Pinkston, Professor Music DMA, Columbia University in the City of New York, 1984

Harvey C Pittel, Professor Emeritus Music MM, Northwestern University, 1967 Russell Podgorsek, Senior Administrative Associate Music DMA, University of Texas at Austin, 2013

Mary Ellen Poole, Professor Florence Thelma Hall Centennial Chair in Music Music PhD, University of Illinois at Urbana-Champaign, 1994

Brant Pope, Professor Z. T. Scott Family Chair in Drama Theatre and Dance PhD, Michigan State University, East Lansing, 2003

Brenda I Preyer, Professor Emeritus Art and Art History PhD, Harvard University, 1976

Robert Ramirez, Associate Professor Theatre and Dance MFA, University of Delaware, 1995

Stephanie Ramirez, Lecturer Art and Art History MFA, University of Texas at Austin, 2017

Susan W Rather, Professor Art and Art History PhD, University of Delaware, 1986

Anastasia S Rees, Lecturer Art and Art History PhD, University of Texas at Austin, 2017

Ann M Reynolds, Associate Professor Art and Art History PhD, City University of New York Graduate Center, 1993

Andrew M Riggsby, Professor Lucy Shoe Meritt Professorship in Classics Art and Art History PhD, University of California-Berkeley, 1993

John Risley, Professor Meredith and Cornelia Long Chair in Art and Art History Art and Art History MFA, Yale University, 1986

Rebecca Rossen, Associate Professor Theatre and Dance PhD, Northwestern University, 2006

Rick E Rowley, Senior Lecturer Music HS/GED, , 1973

Astrid Runggaldier, University Professional (Part-Time) Art and Art History PhD, Boston University, 2009

Janice Lynch Ryan Art and Art History BBA, Baylor University, 1977

Wayne W Salzmann II, Specialist Music MM, University of Texas at Austin, 2010

Kj Sanchez, Associate Professor

Theatre and Dance MFA, University of California-San Diego, 1992

Tamara Sanikidze, Lecturer Music DMA, University of Maryland College Park, 2010

Ray K Sasaki, Professor Frank C. Erwin, Jr. Centennial Professorship in Fine Arts Music MMus, University of North Texas, 1975

Peter A Saul, Professor Emeritus Art and Art History BFA, Washington University in St Louis, 1956

Margo L Sawyer, Professor Art and Art History MFA, Yale University, 1982

D Schmandt-Besserat, Professor Emeritus Art and Art History MA, Ecole Du Louvre, 1965

John C Schmidt, Adjunct Professor Music PhD, New York University, 1979

Robert N Schmidt, Professor Emeritus Theatre and Dance MFA, University of Wisconsin-Madison, 1979

Roxanne Schroeder-Arce, Associate Professor Theatre and Dance MFA, University of Texas at Austin, 2000

Seth O Schwaiger, Lecturer Art and Art History MFA, Glasgow School of Art, 2013

William Schweigert, Lecturer Art and Art History MFA, Northwestern University, 2015

Laurie Pierce Scott, Associate Professor Music PhD, University of Texas at Austin, 1987

Sonia T Seeman, Associate Professor Music PhD, University of California-Los Angeles, 2002

Yevgeniy Sharlat, Associate Professor Music DMA, Yale University, 2007

Patrick Forsythe Shaw, Lecturer Theatre and Dance MFA, University of Texas at Austin, 2015

Andrew B Shea, Professor Theatre and Dance MA, California Institute of the Arts, 1985

Richard A Shiff, Professor Effie Marie Cain Regents Chair in Art Art and Art History PhD, Yale University, 1973

Amy L Simmons, Senior Lecturer

Music PhD, University of Texas at Austin, 2007

Sara M Simons, Lecturer Theatre and Dance PhD, New York University, 2013

Stephen M Slawek, Professor Music PhD, University of Illinois at Urbana-Champaign, 1986

David A Small, Associate Professor Music MM, University of Cincinnati Main Campus, 1987

Jeffrey C Smith, Professor Kay Fortson Chair in European Art Art and Art History PhD, Columbia University in the City of New York, 1979

Matthew R Smith, Lecturer Theatre and Dance MA, Angelo State University, 2012

Michael Smith, Professor Art and Art History BA, Colorado College, 1974

Rachael Angelica Starbuck, Technical Staff Assistant III Art and Art History MFA, University of Texas at Austin, 2017

John S Stoney, Associate Professor Art and Art History MFA, Cranbrook Academy of Art, 1998

Nikita Storojev, Associate Professor Music MFA, Moscow P.I. Tchaikovsky Conservatory, 1979

Stacy A Strakowski, Lecturer Theatre and Dance MM, University of Cincinnati Main Campus, 2001

David S Stuart, Professor Linda and David Schele Chair in the Art and Writing of Mesoamerica Art and Art History PhD, Vanderbilt University, 1995

Daniel D Sutherland, Associate Professor Art and Art History MFA, Syracuse University Main Campus, 1991

Rebecca Switzer, Lecturer Theatre and Dance MFA, University of Arizona, 1987

Lisa B Thompson, Associate Professor Theatre and Dance PhD, Stanford University, 2000

Bion Tsang, Professor Joe R. & Teresa Lozano Long Chair in Cello Music MM, Yale University, 1993

John R Turci, Lecturer Music PhD, Yale University, 2004 Michael C Tusa, Professor Music PhD, Princeton University, 1983

Jarvis W Ulbricht, Professor Emeritus Art and Art History PhD, University of Iowa, 1976

Jason Paul Urban, Senior Lecturer Art and Art History MFA, University of Iowa, 2002

Colette T Valentine, Associate Professor Music DMA, State University of New York at Stony Brook, 2005

Efrain E Velez, Lecturer Art and Art History MArch, University of Texas at Austin, 2006

Charles W Villarrubia, Associate Professor Music MM, Boston University, 1988

Louis A Waldman, Associate Professor Art and Art History PhD, New York University, 1999

James Michael Walker, Lecturer Art and Art History MFA, Virginia Commonwealth University, 2013

Dan E Welcher, Professor The Lee Hage Jamail Regents Professorship in Fine Arts Music MM, Manhattan School of Music, 1972

Marianne Wheeldon, Professor Music PhD, Yale University, 1997

Susan D Whyne, Associate Professor Emeritus Art and Art History MA, University of San Francisco, 1974

Darlene C Wiley, Professor Music MM, University of Illinois at Urbana-Champaign, 1969

Jason R Wilkins, Lecturer Art and Art History BA, University of Arkansas Main Campus, 2010

Holly A Williams, Professor Theatre and Dance MFA, Texas Woman's University - Denton, 1994

Jeff Williams, Associate Professor Art and Art History MFA, Syracuse University Main Campus, 2002

Lyn C Wiltshire, Professor Theatre and Dance BA, State University of New York Empire State College, 1969

Lewis R Wiman, Professor Emeritus Art and Art History MFA, University of Florida, 1966

Patti Wolf, Lecturer

Music MM, Yale University, 1989

Satoko S Yamamoto, Senior Lecturer Music MMus, Cleveland Institute of Music, 1998

John A Yancey, Professor John D. Murchison Regents Professorship in Art Art and Art History MFA, Georgia Southern University, 1993

Jeanette Yew, Lecturer Theatre and Dance MFA, California Institute of the Arts, 2006

Suzan L Zeder, Professor Emeritus Theatre and Dance PhD, Florida State University, 1978

Daxun Zhang, Associate Professor Music BM, Indiana University at Bloomington, 2005

Gerhardt Zimmermann, Professor Jack G. Taylor Regents Professorship in Fine Arts Music MFA, University of Iowa, 1971

# John A. and Katherine G. Jackson School of Geosciences Faculty

The following faculty list represents those appointed in the 2018 spring semester.

Milo M Backus, Professor Emeritus Geological Sciences PhD, Massachusetts Institute of Technology, 1956

Jay L Banner, Professor Fred M. Bullard Professorship in Geological Sciences Geological Sciences PhD, State University of New York at Stony Brook, 1986

Jaime D Barnes, Associate Professor Geological Sciences PhD, University of New Mexico Main Campus, 2006

Thorsten Becker, Professor Shell Companies Foundation Distinguished Chair in Geophysics Geological Sciences PhD, Harvard University, 2002

Whitney Behr, Assistant Professor Geological Sciences PhD, University of Southern California, 2011

Christopher J Bell, Professor Geological Sciences PhD, University of California-Berkeley, 1997

Philip C Bennett, Professor Geological Sciences PhD, Syracuse University Main Campus, 1989

Robert E Boyer, Professor Emeritus Geological Sciences

#### PhD, University of Michigan-Ann Arbor, 1959

Daniel O Breecker, Associate Professor Geological Sciences PhD, University of New Mexico Main Campus, 2008

Meinhard Bayani Cardenas, Professor Geological Sciences PhD, New Mexico Institute of Mining and Technology, 2006

William D Carlson, Professor Emeritus Geological Sciences PhD, University of California-Los Angeles, 1980

Ginny A Catania, Associate Professor Geological Sciences PhD, University of Washington - Seattle, 2004

Elizabeth J Catlos, Associate Professor Geological Sciences PhD, University of California-Los Angeles, 2000

Julia A Clarke, Professor John A. Wilson Professorship in Vertebrate Paleontology Geological Sciences PhD, Yale University, 2002

Mark P Cloos, Professor Getty Oil Company Centennial Chair in Geological Sciences Geological Sciences PhD, University of California-Los Angeles, 1981

Kerry H Cook, Professor Geological Sciences PhD, North Carolina State University, 1984

Ian W Dalziel, Professor Geological Sciences PhD, University of Edinburgh, 1963

Pedro Di Nezio, Lecturer Geological Sciences PhD, University of Miami, 2011

Robert E Dickinson, Professor Geological Sciences PhD, Massachusetts Institute of Technology, 1966

Peter Eichhubl, Lecturer Geological Sciences PhD, University of California-Santa Barbara, 1997

William L Fisher, Professor Leonidas T. Barrow Centennial Chair in Mineral Resources Energy and Earth Resources Geological Sciences PhD, University of Kansas Main Campus, 1980

Peter B Flemings, Professor John A. and Katherine G. Jackson Chair in Energy and Mineral Resources Energy and Earth Resources Geological Sciences PhD, Cornell University, 1990

Robert L Folk, Professor Emeritus Geological Sciences PhD, Pennsylvania State University Main Campus, 1952

Sergey B Fomel, Professor

Wallace E. Pratt Professorship in Geophysics Geological Sciences PhD, Stanford University, 2001

Rong Fu, Adjunct Professor Geological Sciences PhD, Columbia University in the City of New York, 1991

William E Galloway, Professor Emeritus Geological Sciences PhD, University of Texas at Austin, 1971

James E Gardner, Professor Geological Sciences PhD, University of Rhode Island, 1993

Omar Ghattas, Professor John A. and Katherine G. Jackson Chair in Computational Geosciences Geological Sciences PhD, Duke University, 1988

Jennifer H Gillespie, Other University Affiliate Geological Sciences PhD, University of Texas at Austin, 2011

Stephen P Grand, Professor Shell Companies Foundation Centennial Chair in Geophysics Geological Sciences PhD, California Institute of Technology, 1986

Sean S Gulick, Research Professor (Affiliated) Geological Sciences PhD, Lehigh University, 2000

Nicholas W Hayman, Lecturer Geological Sciences PhD, University of Washington - Seattle, 2003

Patrick Heimbach, Associate Professor Geological Sciences PhD, University of Hamburg, 1998

Mark A Helper, Distinguished Senior Lecturer Geological Sciences PhD, University of Texas at Austin, 1985

Marc A Hesse, Associate Professor Geological Sciences PhD, Stanford University, 2008

John W Holt, Research Professor (Affiliated) Geological Sciences PhD, California Institute of Technology, 1997

Brian K Horton, Professor Alexander Deussen Professorship of Energy Resources Geological Sciences PhD, University of Arizona, 1998

Charles S Jackson, Lecturer Geological Sciences PhD, University of Chicago, 1998

Farzam Javadpour, Lecturer Geological Sciences PhD, University of Calgary, 2006

Joel Peterson Johnson, Associate Professor Geological Sciences

### PhD, Massachusetts Institute of Technology, 2007

John W Kappelman Jr, Professor Geological Sciences PhD, Harvard University, 1987

Charles Kerans, Professor Robert K. Goldhammer Chair in Carbonate Geology, Wilton E. Scott Centennial Professorship Energy and Earth Resources Geological Sciences PhD, Carleton University, 1982

Richard A Ketcham, Professor The First Mr. and Mrs. Charles E. Yager Professorship Geological Sciences PhD, University of Texas at Austin, 1995

Wonsuck Kim, Associate Professor Geological Sciences PhD, University of Minnesota-Twin Cities, 2007

Gary A Kocurek, Professor Emeritus Geological Sciences PhD, University of Wisconsin-Madison, 1980

J Richard Kyle, Professor The Third Mr. and Mrs. Charles E. Yager Professorship Energy and Earth Resources Geological Sciences PhD, University of Western Ontario, 1977

Lynton S Land, Professor Emeritus Geological Sciences PhD, Lehigh University, 1966

John C Lassiter, Associate Professor Geological Sciences PhD, University of California-Berkeley, 1995

Luc L Lavier, Associate Professor Geological Sciences PhD, Columbia University in the City of New York, 1999

Jung-Fu Lin, Associate Professor Geological Sciences PhD, University of Chicago, 2002

Leon E Long, Professor Emeritus Geological Sciences PhD, Columbia University in the City of New York, 1959

E L Lundelius Jr, Professor Emeritus Geological Sciences PhD, University of Chicago, 1954

Barbara J Mahler, Lecturer Geological Sciences PhD, University of Texas at Austin, 1997

Rowan Clare Martindale, Assistant Professor Geological Sciences PhD, University of Southern California, 2012

Ashley Michelle Matheny, Assistant Professor Geological Sciences PhD, Ohio State U Main Campus, 2016

Arthur E Maxwell, Professor Emeritus

Geological Sciences PhD, University of California-San Diego, 1959

Earle F McBride, Professor Emeritus Geological Sciences PhD, Johns Hopkins University, 1960

Timothy A Meckel, Lecturer Geological Sciences PhD, University of Texas at Austin, 2003

Nathaniel R Miller, Research Engineering/ Scientist Associate V Geological Sciences PhD, University of Texas at Dallas, 1995

Kevan Moffett, Adjunct Assistant Professor Geological Sciences PhD, Stanford University, 2010

David Mohrig, Professor John E. "Brick" Elliott Centennial Endowed Professorship in Geological Sciences Geological Sciences PhD, University of Washington - Seattle, 1994

Sharon Mosher, Professor William Stamps Farish Chair in Geology, John A. and Katherine G. Jackson Decanal Chair in the Geosciences Geological Sciences PhD, University of Illinois at Urbana-Champaign, 1978

Yosio Nakamura, Professor Emeritus Geological Sciences PhD, Pennsylvania State University Main Campus, 1963

Cornel Olariu, Lecturer Geological Sciences PhD, University of Texas at Dallas, 2005

Jon E Olson, Professor Lois K. and Richard D. Folger Leadership Chair in Petroleum and Geosystems Engineering, Frank W. Jessen Professorship in Petroleum Engineering Energy and Earth Resources PhD, Stanford University, 1991

Raymond Lee Orbach, Professor Geological Sciences PhD, University of California-Berkeley, 1960

Jeffrey G Paine, Lecturer Geological Sciences PhD, University of Texas at Austin, 1991

Camille Parmesan, Adjunct Professor Geological Sciences PhD, University of Texas at Austin, 1995

Judson W Partin, Lecturer Geological Sciences PhD, Georgia Institute of Technology, 2008

Suzanne A Pierce, Lecturer Geological Sciences PhD, University of Texas at Austin, 2006

Mary F Poteet, Lecturer Geological Sciences

#### PhD, University of California-Berkeley, 2001

Terrence M Quinn, Professor Albert W. and Alice M. Weeks Centennial Professorship in Geological Sciences Geological Sciences PhD, Brown University, 1989

Daniella M Rempe, Assistant Professor Geological Sciences PhD, University of California-Berkeley, 2016

Timothy B Rowe, Professor J. Nalle Gregory Regents Professorship in Geological Sciences Geological Sciences PhD, University of California-Berkeley, 1986

Stephen C Ruppel, Lecturer Geological Sciences PhD, University of Illinois at Urbana-Champaign, 1979

Mrinal K Sen, Professor John A. and Katherine G. Jackson Chair in Applied Seismology Geological Sciences PhD, University of Hawaii at Manoa, 1987

Timothy M Shanahan, Associate Professor Geological Sciences PhD, University of Arizona, 2006

John M Sharp Jr, Professor Dave P. Carlton Centennial Professorship in Geology Geological Sciences PhD, University of Illinois at Urbana-Champaign, 1974

Douglas Smith, Professor Emeritus Geological Sciences PhD, California Institute of Technology, 1969

Kyle Thomas Spikes, Associate Professor Geological Sciences PhD, Stanford University, 2008

James T Sprinkle, Professor Emeritus Geological Sciences PhD, Harvard University, 1971

Ronald J Steel, Professor Morgan J. Davis Centennial Chair in Petroleum Geology Geological Sciences PhD, University of Glasgow, 1972

Daniel Stockli, Professor Chevron Centennial Professorship in Geology Geological Sciences PhD, Stanford University, 2000

Paul L Stoffa, Professor Emeritus Geological Sciences PhD, Columbia University in the City of New York, 1974

Robert H Tatham, Professor Emeritus Geological Sciences PhD, Columbia University in the City of New York, 1975

Scott W Tinker, Professor Edwin Allday Centennial Chair in Subsurface Geology Geological Sciences PhD, University of Colorado at Boulder, 1996

Nicola Tisato, Assistant Professor Geological Sciences PhD, Swiss Federal Institute of Technology, 2013

Carlos Torres-Verdin, Professor Brian James Jennings Memorial Endowed Chair in Petroleum and Geosystems Engineering Geological Sciences PhD, University of California-Berkeley, 1991

Clark R Wilson, Professor Dave P. Carlton Centennial Professorship in Geophysics Geological Sciences PhD, University of California-San Diego, 1975

Zong-Liang Yang, Professor John A. and Katherine G. Jackson Chair in Earth System Sciences Geological Sciences PhD, Macquarie University, 1992

# **School of Information Faculty**

The following faculty list represents those appointed in the 2018 spring semester.

Amelia Acker, Assistant Professor PhD, University of California-Los Angeles, 2014

Jennifer E Allen, Adjunct Assistant Professor MS, University of Texas at Austin, 2017

Diane E Bailey, Associate Professor PhD, University of California-Berkeley, 1994

Jakki Bailey, Assistant Professor PhD, Stanford University, 2018

Jullianne Hughes Ballou, Lecturer MS, University of Texas at Austin, 2016

Suzanne Barber, Professor AT&T Foundation Endowed Professorship in Engineering PhD, University of Texas at Arlington, 1992

Brenda L Berkelaar, Lecturer PhD, Purdue University Main Campus, 2010

Randolph G Bias, Professor PhD, University of Texas at Austin, 1978

Barbara A Bintliff, Professor Joseph C. Hutcheson Professorship in Law JD, University of Washington - Seattle, 1978

Craig E Blaha, Lecturer MA, Claremont Graduate University, 1996

Sarah Grace Britt, Adjunct Assistant Professor MSInfoStds, University of Texas at Austin, 2016

Ramona L Broussard, Lecturer MSInfoStds, University of Texas at Austin, 2010

Kate Catterall, Associate Professor MA, Glasgow School of Art, 1992

Tanya Elizabeth Clement, Associate Professor

PhD, University of Maryland College Park, 2009

Mary C Criner, Lecturer PhD, Louisiana State University and Agricultural and Mechanical College, 2000

Sarah H Cunningham, Lecturer MS, University of Texas at Austin, 2003

Donald G Davis Jr, Professor Emeritus PhD, University of Illinois at Urbana-Champaign, 1972

Andrew P Dillon, Professor Vara Martin Daniel Regents Professorship in Libraries, Archives & Information Studies PhD, Loughborough University, 1991

Philip Doty, Associate Professor PhD, Syracuse University Main Campus, 1995

Rebecca K Elder, Adjunct Assistant Professor MSLS, University of Texas at Austin, 2003

Kenneth Robert Fleischmann, Associate Professor PhD, Rensselaer Polytechnic Institute, 2004

Margaret M Foster, Adjunct Assistant Professor MS, University of Texas at Austin, 1999

Patricia K Galloway, Professor PhD, University of North Carolina at Chapel Hill, 2004

David B Gracy II, Professor Emeritus PhD, Texas Tech University, 1971

Stanley T Gunn Jr, Adjunct Assistant Professor MLS, University of Texas at Austin, 1998

Danna Gurari, Assistant Professor PhD, Boston University, 2015

Jacek Gwizdka, Assistant Professor PhD, University of Toronto, 2004

Julie Hallmark, Professor Emeritus PhD, University of Texas at Austin, 1973

Lorraine J Haricombe, Professor PhD, University of Illinois at Urbana-Champaign, 1992

Lance A Hayden, Adjunct Assistant Professor PhD, University of Texas at Austin, 2009

Billie G Herring, Professor Emeritus PhD, University of Texas at Austin, 1974

James L Howison, Associate Professor PhD, Syracuse University Main Campus, 2009

Barbara F Immroth, Professor Emeritus PhD, University of Pittsburgh, Pittsburgh Campus, 1980

Barbara A Jansen, Adjunct Assistant Professor PhD, University of Texas at Austin, 2014

Unmil P Karadkar, Assistant Professor PhD, Texas A & M University, 2011

April D Kessler, Adjunct Assistant Professor MS, University of Texas at Austin, 2004 Matthew A Lease, Associate Professor PhD, Brown University, 2009

Zandra I Lopez, Adjunct Assistant Professor MLS, Emporia State University, 2005

Bill Lukenbill, Professor Emeritus PhD, Indiana University at Bloomington, 1973

Robert S McCleskey, Lecturer JD, St Mary's University, 1998

Francis L Miksa, Professor Emeritus PhD, University of Chicago, 1974

Ann E Minner, Adjunct Assistant Professor MLIS, University of Texas at Austin, 1998

Eric Nordquist, Clinical Associate Professor MA, New Mexico State University Main Campus, 2004

Kristen S Oglesbee, Adjunct Assistant Professor MSInfoStds, University of Texas at Austin, 2016

Karen L Pavelka, Senior Lecturer MS, Columbia University in the City of New York, 1988

Walker E Riley, Adjunct Assistant Professor MS, University of Texas at Austin, 2017

Marion E Rocco, Adjunct Assistant Professor MS, University of Texas at Austin, 2011

Elizabeth Rogers, Adjunct Assistant Professor JD, St Mary's University, 1988

Loriene Roy, Professor PhD, University of Illinois at Urbana-Champaign, 1987

Alonzo F Seay, Adjunct Assistant Professor PhD, Carnegie Mellon University, 2006

Jeremy M Selvidge, Adjunct Assistant Professor MS, University of Texas at Austin, 2015

Clay Spinuzzi, Professor PhD, Iowa State University, 1999

Stephanie D Swenson, Adjunct Assistant Professor JD, University of Texas at Austin, 1994

Edison Thomaz Jr, Research Assistant Professor (Affiliated) PhD, Georgia Institute of Technology, 2016

Ciaran Trace, Associate Professor PhD, University of California-Los Angeles, 2004

Christine A Walczyk, Adjunct Assistant Professor PhD, University of North Texas, 2016

Jo Lynn Westbrook, Associate Professor PhD, University of Michigan-Ann Arbor, 1995

Andrew B Whinston, Professor Hugh Roy Cullen Centennial Chair in Business Administration PhD, Carnegie Mellon University, 1962

Karen M Wickett, Assistant Professor PhD, University of Illinois at Urbana-Champaign, 2012

Michael B Winship, Professor

Iris Howard Regents Professorship in English Literature #2 DPhil, University of Oxford, 1990

Ronald E Wyllys, Professor Emeritus PhD, University of Wisconsin-Madison, 1974

Bo Xie, Associate Professor PhD, Rensselaer Polytechnic Institute, 2006

Yan Zhang, Associate Professor PhD, University of North Carolina at Chapel Hill, 2009

# **College of Liberal Arts Faculty**

The following faculty list represents those appointed in the 2018 spring semester.

Jeffrey Bruce Abramson, Professor Government PhD, Harvard University, 1977

Jason Abrevaya, Professor Murray S. Johnson Chair in Economics Economics PhD, Massachusetts Institute of Technology, 1996

Robert H Abzug, Professor Audre and Bernard Rapoport Regents Chair of Jewish Studies American Studies History Jewish Studies PhD, University of California-Berkeley, 1977

Daniel A Ackerberg, Professor Addison Baker Duncan Centennial Professorship in Economics PhD, Yale University, 1997

Michael W Adams, Associate Professor English PhD, University of Texas at Austin, 1973

Paul C Adams, Professor Geography and the Environment PhD, University of Wisconsin-Madison, 1993

Richard N Adams, Professor Emeritus Anthropology PhD, Yale University, 1951

Christopher O Adejumo, Associate Professor African and African Diaspora Studies PhD, Ohio State U Main Campus, 1997

Abimbola Adunni Adelakun, Lecturer African and African Diaspora Studies PhD, University of Texas at Austin, 2017

Ari Adut, Associate Professor Sociology PhD, University of Chicago, 2004

Omoniyi Afolabi, Associate Professor African and African Diaspora Studies African and African Diaspora Studies PhD, University of Wisconsin-Madison, 1997

Kamran S Aghaie, Associate Professor History Middle Eastern Studies Middle Eastern Studies Ctr Women's and Gender Studies PhD, University of California-Los Angeles, 1999

Yukie Aida, Senior Lecturer Asian Studies PhD, University of Texas at Austin, 1988

Helene M Aji English PhD, Universite de Picardie Jules Verne, 1997

Erick Akins, Lecturer Geography and the Environment MA, Trinity University, 1988

Olla N Al-Shalchi, Lecturer Middle Eastern Studies PhD, Old Dominion University, 2015

Ilana Albanese, Clinical Assistant Professor Psychology PhD, University of Florida, 1994

Bethany L Albertson, Associate Professor Government PhD, University of Chicago, 2006

Duane G Albrecht, Professor Emeritus Psychology PhD, University of California-Berkeley, 1978

Marina Alexandrova, Lecturer Slavic and Eurasian Studies PhD, University of Texas at Austin, 2010

Kamran Ali, Professor Anthropology Asian Studies Middle Eastern Studies Middle Eastern Studies Ctr PhD, Johns Hopkins University, 1998

Andres Almazan, Professor Economics PhD, Massachusetts Institute of Technology, 1996

Megan Alrutz, Associate Professor Women's and Gender Studies PhD, Arizona State University Main, 2004

Chad Alvarez, Assistant Professor History PhD, University of Chicago, 2014

Carrie Andersen, Lecturer American Studies PhD, University of Texas at Austin, 2017

Charles O Anderson, Associate Professor African and African Diaspora Studies African and African Diaspora Studies MFA, Temple University, 2002

Michael R Anderson, Senior Lecturer Government PhD, University of Texas at Austin, 2009 Jacqueline L Angel, Professor Sociology PhD, Rutgers the State University of New Jersey New Brunswick Campus, 1989

Ronald J Angel, Professor Sociology PhD, University of Wisconsin-Madison, 1981

Manuela Angelucci, Associate Professor Economics PhD, University College London, 2005

Katherine M Arens, Professor Germanic Studies Women's and Gender Studies PhD, Stanford University, 1981

Eugenio Yatsuda Arima, Associate Professor Geography and the Environment PhD, Michigan State University, East Lansing, 2005

Minou Arjomand, Assistant Professor English PhD, Columbia University in the City of New York, 2013

Jossiann Arroyo Martinez, Professor African and African Diaspora Studies African and African Diaspora Studies Spanish and Portuguese PhD, University of California-Berkeley, 1998

Lucinda Jane Atkinson, Associate Professor Women's and Gender Studies PhD, University of Wisconsin-Madison, 2009

Blake R Atwood, Assistant Professor Middle Eastern Studies PhD, University of Texas at Austin, 2011

Javier Auyero, Professor Joe R. & Teresa Lozano Long Endowed Professorship #3 Sociology PhD, New Sch for Soc Research, 1998

Germine H Awad, Associate Professor African and African Diaspora Studies African and African Diaspora Studies Middle Eastern Studies Ctr PhD, Southern Illinois University Carbondale, 2005

Samy Ayoub, Lecturer Middle Eastern Studies PhD, University of Arizona, 2014

James B Ayres, Professor Emeritus English PhD, Ohio University Main Campus, 1964

Jennifer L Ayres, Clinical Assistant Professor Psychology PhD, University of Texas Southwestern Medical Center at Dallas, 2000

Hina Azam, Associate Professor Middle Eastern Studies Middle Eastern Studies Ctr PhD, Duke University, 2007

Mary J Baker, Professor Emeritus

French and Italian PhD, Harvard University, 1969

Samuel Baker, Associate Professor English PhD, University of Chicago, 2001

Jorge Francisco Balat, Assistant Professor Economics PhD, Yale University, 2012

Dana H Ballard, Professor Psychology PhD, University of California-Irvine, 1974

Aaron Bar-Adon, Professor Emeritus Middle Eastern Studies PhD, Hebrew University, 1959

Courtney C Barajas, Lecturer English PhD, University of Texas at Austin, 2017

Zoltan D Barany, Professor Frank C. Erwin, Jr. Centennial Professorship in Government Government Middle Eastern Studies Ctr PhD, University of Virginia (Old Code), 1991

Janine Barchas, Professor Louann and Larry Temple Centennial Professorship in English Literature English PhD, University of Chicago, 1995

Jeffrey Barnouw, Professor Emeritus English PhD, Yale University, 1969

J K Barret, Associate Professor English PhD, Princeton University, 2008

Phillip J Barrish, Professor Tony Hilfer Professorship in American and British Literature English PhD, Cornell University, 1991

Alice L Batt, Lecturer Rhetoric and Writing PhD, University of Texas at Austin, 1996

Vickie Gaudin Bauerle, Clinical Assistant Professor MEd, University of Houston, 1983

Thomas A Bay, Adjunct Professor PhD, Columbia University in the City of New York, 1987

Sheryl Luzzadder Beach, Professor Geography and the Environment PhD, University of Minnesota-Twin Cities, 1990

Timothy Beach, Professor C. B. Smith, Sr. Centennial Chair in United States-Mexico Relations #2 Geography and the Environment PhD, University of Minnesota-Twin Cities, 1989

Marie-Catherine Bearden, Lecturer French and Italian MA, Middlebury College, 2010 David I Beaver, Professor Linguistics PhD, University of Edinburgh, 1995

John T Beavers, Associate Professor Linguistics PhD, Stanford University, 2006

Jennifer S Beer, Professor Psychology PhD, University of California-Berkeley, 2002

Christopher G Beevers, Professor Wayne H. Holtzman Regents Chair in Psychology Psychology PhD, University of Miami, 2002

Kirsten L Belgum, Associate Professor Germanic Studies PhD, University of Wisconsin-Madison, 1989

Mary C Beltran, Associate Professor Women's and Gender Studies PhD, University of Texas at Austin, 2002

Valerie R Bencivenga, Senior Lecturer Economics PhD, University of Toronto, 1985

Marvin C Bendele, Senior Administrative Program Coordinator American Studies PhD, University of Texas at Austin, 2015

Chad J Bennett, Assistant Professor English Women's and Gender Studies PhD, Cornell University, 2011

Lloyd S Berg, Clinical Assistant Professor Psychology PhD, University of Texas at Austin, 1995

Vladislav Beronja, Assistant Professor Slavic and Eurasian Studies PhD, University of Michigan-Ann Arbor, 2014

Betsy A Berry, Senior Lecturer English PhD, University of Texas at Austin, 1994

Daina R Berry, Associate Professor African and African Diaspora Studies African and African Diaspora Studies History Women's and Gender Studies PhD, University of California-Los Angeles, 1998

Lance Bertelsen, Professor Iris Howard Regents Professorship in English Literature English PhD, University of Washington - Seattle, 1979

Venkataraman Bhaskar, Professor Sue Killam Professorship in the Foundations of Economics Economics DPhil, University of Oxford, 1988

Chandra R Bhat, Professor Joe J. King Chair of Engineering Economics PhD, Northwestern University, 1991

Saroj Bhattarai, Assistant Professor Economics PhD, Princeton University, 2010

Julia A Biggerstaff Haug, Clinical Assistant Professor BA, University of Texas at Austin, 1997

Rebecca Bigler, Professor Psychology Women's and Gender Studies PhD, Pennsylvania State University Park, 1991

Douglas G Biow, Professor The Superior Oil Company - Linward Shivers Centennial Professorship in Medieval and Renaissance Studies French and Italian History PhD, Johns Hopkins University, 1990

David P Birdsong, Professor David Bruton, Jr. Centennial Professorship in Modern Languages French and Italian PhD, Harvard University, 1979

Daniel J Birkholz, Associate Professor English PhD, University of Minnesota-Twin Cities, 1999

Marc Bizer, Professor French and Italian PhD, Princeton University, 1993

Mary E Blockley, Professor English PhD, Yale University, 1984

Carl S Blyth, Associate Professor French and Italian PhD, Cornell University, 1990

Hans C Boas, Professor The Raymond Dickson, Alton C. Allen and Dillon Anderson Centennial Professorship Germanic Studies Linguistics PhD, University of North Carolina at Chapel Hill, 2000

Mary A Bock, Assistant Professor Women's and Gender Studies PhD, University of Pennsylvania, 2009

Marion Enid Bodian, Professor History PhD, Hebrew University, 1988

Christoph Boehm, Assistant Professor Economics PhD, University of Michigan-Ann Arbor, 2016

Deborah A Bolnick, Associate Professor Anthropology PhD, University of California-Davis, 2005

Daniel A Bonevac, Professor Philosophy

# PhD, University of Pittsburgh, Pittsburgh Campus, 1980

Paola Bonifazio, Associate Professor French and Italian Women's and Gender Studies PhD, New York University, 2008

John G Bordie, Professor Emeritus Linguistics PhD, University of Texas at Austin, 1958

Jason R Borge, Associate Professor Spanish and Portuguese PhD, University of California-Berkeley, 2002

Pascale R Bos, Associate Professor Germanic Studies Women's and Gender Studies PhD, University of Minnesota-Twin Cities, 1998

Carlos E Bowles, Lecturer MEd, University of Texas at Austin, 2002

Svetlana Boyarchenko, Associate Professor Economics PhD, Rostov State University, 1983

Agnes M Boyer - Lafont, Visiting Associate Professor English PhD, Universite Paul Valery, Montpellier III, 2003

Robert S Boyer, Professor Emeritus Philosophy PhD, University of Texas at Austin, 1971

Casey A Boyle, Assistant Professor Rhetoric and Writing PhD, University of South Carolina - Columbia, 2011

Kirsten E Bradbury, Lecturer Psychology PhD, Virginia Polytechnic Institute and State University, 2005

Claud A Bramblett, Professor Emeritus Anthropology PhD, University of California-Berkeley, 1967

H W Brands, Professor Jack S. Blanton, Sr. Chair in History History PhD, University of Texas at Austin, 1985

Sarah Brayne, Assistant Professor Sociology MA, Princeton University, 2012

Brian A Bremen, Associate Professor English PhD, Princeton University, 1989

Joel P Brereton, Professor Asian Studies Religious Studies PhD, Yale University, 1975

Sharon Bridgforth, Lecturer African and African Diaspora Studies BA, California State University-Los Angeles, 1985

Stephen Bright, Lecturer

Psychology PhD, University of Michigan-Ann Arbor, 1993

Daniel M Brinks, Associate Professor Government PhD, University of Notre Dame, 2004

James B Brow, Professor Emeritus Anthropology Asian Studies PhD, University of Washington - Seattle, 1974

Benjamin C Brower, Associate Professor History Middle Eastern Studies Ctr PhD, Cornell University, 2005

Anthony L Brown, Associate Professor African and African Diaspora Studies African and African Diaspora Studies PhD, University of Wisconsin-Madison, 2006

Carolyn M Brown, Professor African and African Diaspora Studies PhD, University of Florida, 1994

Jonathan C Brown, Professor History Latin American Studies PhD, University of Texas at Austin, 1976

Keffrelyn D Brown, Associate Professor African and African Diaspora Studies African and African Diaspora Studies Women's and Gender Studies PhD, University of Wisconsin-Madison, 2006

Tazh N Brown, Assistant Professor-ROTC Military Science MA, University of Louisville, 2017

Simone A Browne, Associate Professor African and African Diaspora Studies African and African Diaspora Studies Sociology Women's and Gender Studies PhD, University of Toronto, 2007

Grayson D Browning, Professor Emeritus Philosophy PhD, University of Texas at Austin, 1958

Harley L Browning, Professor Emeritus Sociology PhD, University of California-Berkeley, 1962

Jason M Brownlee, Professor Government Middle Eastern Studies Middle Eastern Studies Ctr PhD, Princeton University, 2004

Kristen Brustad, Associate Professor Middle Eastern Studies Middle Eastern Studies Ctr PhD, Harvard University, 1991

Douglas S Bruster, Professor

Mody C. Boatright Regents Professorship in American and English Literature English PhD, Harvard University, 1990

Erika M Bsumek, Associate Professor History PhD, Rutgers the State University of New Jersey New Brunswick Campus, 2000

Bruce Buchanan II, Professor Emeritus Government PhD, Yale University, 1972

Lawrence R Buchanan, Associate Professor Philosophy PhD, New York University, 2008

Tom Buckley, Specialist Rhetoric and Writing MA, Pennsylvania State University Park, 1985

J Budziszewski, Professor Government Philosophy PhD, Yale University, 1981

Walter L Buenger Jr, Professor Summerlee Foundation Chair in Texas History, Barbara White Stuart Centennial Professorship in Texas History History PhD, Rice University, 1979

Barbara Ellen Bullock, Professor French and Italian Spanish and Portuguese PhD, University of Delaware, 1990

Jerome F Bump, Professor English PhD, University of California-Berkeley, 1972

Melissa R Bunner, Clinical Assistant Professor Psychology PhD, University of Texas at Austin, 1997

Virginia Garrard Burnett, Professor Chair for Western Hemispheric Trade Studies, Joe R. & Teresa Lozano Long Endowed Professorships History Religious Studies PhD, Tulane University, 1986

Walter D Burnham, Professor Emeritus Government PhD, Harvard University, 1962

Nicole Alexis Burrowes, Assistant Professor African and African Diaspora Studies History PhD, City University of New York Graduate Center, 2015

Brenda H Burt, Diversity and Community Engagement Officer African and African Diaspora Studies BS, Morgan State University, 1973

W Amon Burton Jr LLB, University of Texas at Austin, 1968 Noel B Busch-Armendariz, Professor Endowed President's Professorship Women's and Gender Studies PhD, University of South Carolina - Columbia, 2000

Arnold H Buss, Professor Emeritus Psychology PhD, Indiana University at Bloomington, 1952

David M Buss, Professor Psychology PhD, University of California-Berkeley, 1981

Johnny S Butler, Professor J. Marion West Chair for Constructive Capitalism African and African Diaspora Studies Sociology PhD, Northwestern University, 1974

Matthew J Butler, Associate Professor History PhD, University of Bristol, 2000

Cris Cabello De Martinez, Senior Lecturer Spanish and Portuguese PhD, University of Texas at Austin, 1993

Thomas M Cable, Professor Emeritus English PhD, University of Texas at Austin, 1969

Marika Cabral, Assistant Professor Economics PhD, Stanford University, 2011

Clare Callahan, Lecturer English PhD, Duke University, 2016

Craig A Campbell, Associate Professor Anthropology Slavic and Eurasian Studies PhD, University of Alberta, 2009

Jorge Canizares, Professor Alice Jane Drysdale Sheffield Regents Professorship in History History PhD, University of Wisconsin-Madison, 1995

Charlotte Canning, Professor Frank C. Erwin, Jr. Centennial Professorship in Drama African and African Diaspora Studies Women's and Gender Studies PhD, University of Washington - Seattle, 1991

Paola Canova, Assistant Professor Anthropology PhD, University of Arizona, 2014

Carlos A Capra, Lecturer French and Italian DMA, University of Texas at Austin, 1999

Luis E Carcamo-Huechante, Associate Professor Spanish and Portuguese PhD, Cornell College, 2001

Don E Carleton, Senior Lecturer History

### PhD, University of Houston, 1978

Caryn L Carlson, Professor Psychology PhD, University of Georgia, 1984

Nicolas Carrasco, Clinical Assistant Professor Psychology PhD, University of Texas at Austin, 1990

Patrick J Carroll, Senior Lecturer Psychology PhD, University of Massachusetts, 1983

Charles Daniel Carson, Associate Professor African and African Diaspora Studies PhD, University of Pennsylvania, 2008

Daniela Bini Carter, Professor French and Italian PhD, University of Texas at Austin, 1970

Mia E Carter, Associate Professor English PhD, University of Wisconsin-Milwaukee, 1992

Evan B Carton, Professor Joan Negley Kelleher Centennial Professorship in Rhetoric and Composition English PhD, Johns Hopkins University, 1979

Oscar H Casares, Associate Professor English MFA, University of Iowa, 2001

Robert L Causey, Professor Emeritus Philosophy PhD, University of California-Berkeley, 1967

Jean-Pierre B Cauvin, Professor Emeritus French and Italian PhD, Princeton University, 1968

Shannon E Cavanagh, Associate Professor Sociology Women's and Gender Studies PhD, University of North Carolina at Chapel Hill, 2003

Edward Chambers, Professor African and African Diaspora Studies PhD, University of London, 1998

Frances A Champagne, Professor Psychology PhD, McGill University, 2004

Bharath Chandrasekaran, Associate Professor Linguistics Psychology PhD, Purdue University Main Campus, 2008

Chih-Wei Chang, Lecturer Asian Studies MA, University of Texas at Austin, 2000

Sung-Sheng Yvonne Chang, Professor Asian Studies PhD, Stanford University, 1985 Terrence L Chapman, Associate Professor Government PhD, Emory University, 2007

Davida H Charney, Professor English Rhetoric and Writing PhD, Carnegie Mellon University, 1985

Mounira M Charrad, Associate Professor Middle Eastern Studies Middle Eastern Studies Ctr Sociology Women's and Gender Studies PhD, Harvard University, 1980

Indrani Chatterjee, Professor Asian Studies History PhD, University of London, 1996

Karma Ruth Chavez, Associate Professor Rhetoric and Writing Women's and Gender Studies PhD, Arizona State University Main, 2007

Jacob Earl Cheadle, Professor Sociology PhD, Pennsylvania State University Park, 2005

Jeanette C Chen, Lecturer Asian Studies MA, Middlebury College, 1983

Richard A Cherwitz, Professor Ernest A. Sharpe Centennial Professorship in Communication Rhetoric and Writing PhD, University of Iowa, 1978

Tshepo Chery, Assistant Professor African and African Diaspora Studies History PhD, University of Pennsylvania, 2012

Zach W Childers, Lecturer Linguistics PhD, University of Texas at Austin, 2016

Karen L Chilstrom, Lecturer Slavic and Eurasian Studies PhD, University of Texas at Austin, 2016

George S Christian, Adjunct Professor English PhD, University of Texas at Austin, 2000

Jessica A Church-Lang, Assistant Professor Psychology PhD, Washington University in St Louis, 2008

Harry M Cleaver Jr, Associate Professor Emeritus Economics PhD, Stanford University, 1975

Tanya Elizabeth Clement, Associate Professor English PhD, University of Maryland College Park, 2009

Diane L Coffey, Assistant Professor

Sociology PhD, Princeton University, 2015

Judith G Coffin, Associate Professor History PhD, Yale University, 1985

Leslie B Cohen, Professor Emeritus Psychology PhD, University of California-Los Angeles, 1966

Olivier Coibion, Associate Professor Economics PhD, University of Michigan-Ann Arbor, 2007

Kevin O Cokley, Professor Oscar and Anne Mauzy Regents Professorship for Educational Research and Development African and African Diaspora Studies African and African Diaspora Studies PhD, Georgia State University, 1998

Jason Cons, Assistant Professor Anthropology PhD, Cornell University, 2011

Chikako H Cooke, Lecturer Asian Studies MA, University of Wisconsin Colleges, 1995

Cary Cordova, Associate Professor American Studies PhD, University of Texas at Austin, 2005

Lawrence K Cormack, Professor Psychology PhD, University of California-Berkeley, 1992

Rikke P Cortsen, Lecturer Germanic Studies PhD, University of Copenhagen, 2012

Kurt Cousins, Lecturer Sociology MD, University of North Carolina at Chapel Hill, 2008

Ronald Covey, Professor Anthropology PhD, University of Michigan-Ann Arbor, 2003

James H Cox, Professor English PhD, University of Nebraska - Lincoln, 1999

K Cox, Lecturer English PhD, University of Texas at Austin, 2016

Alison Craig, Assistant Professor Government PhD, The Ohio State University Main Campus, 2017

Darrell G Creel, Associate Professor Emeritus Anthropology PhD, University of Arizona, 1986

David F Crew, Professor History PhD, Cornell University, 1975 David P Crews, Professor Psychology PhD, Rutgers the State University of New Jersey Newark Campus, 1973

Kelley A Crews, Associate Professor Geography and the Environment PhD, University of North Carolina at Chapel Hill, 2000

Zachary A Crippen, Assistant Professor-ROTC Air Force Science MPhil, University of Oxford, 2014

Alfred W Crosby Jr, Professor Emeritus American Studies Geography and the Environment History PhD, Boston University, 1961

Robert Crosnoe, Professor Rapoport Centennial Professorship of Liberal Arts Psychology Sociology PhD, Stanford University, 1999

Jonathan Crosson, Assistant Professor African and African Diaspora Studies Anthropology Religious Studies PhD, University of California-Santa Cruz, 2014

Megan J Crowhurst, Associate Professor Linguistics PhD, University of Arizona, 1991

Elizabeth Cullingford, Professor Jane Weinert Blumberg Chair in English English Women's and Gender Studies PhD, University of Oxford, 1977

James P Curley, Associate Professor Psychology PhD, University of Cambridge, 2003

Ann Cvetkovich, Professor Ellen Clayton Garwood Centennial Professorship in Creative Writing #2 English Women's and Gender Studies PhD, Cornell University, 1988

Douglas C Dacy, Professor Emeritus Economics PhD, Harvard University, 1963

Jonathan Dancy, Professor Philosophy MA, University of Oxford, 1972

D D Davis, Professor English Rhetoric and Writing PhD, University of Texas at Arlington, 1995

Donald R Davis, Associate Professor Asian Studies PhD, University of Texas at Austin, 2000

Janet M Davis, Professor American Studies History PhD, University of Wisconsin-Madison, 1998

King E Davis, Professor Emeritus African and African Diaspora Studies PhD, Brandeis University, 1972

Kaya De Barbaro, Assistant Professor Psychology PhD, University of California-San Diego, 2012

Jack C De La Torre, Adjunct Professor Psychology PhD, University of Geneva, 1968

Susan De Luca, Assistant Professor Women's and Gender Studies PhD, Ohio State U Main Campus, 2009

Susan Deans-Smith, Associate Professor History PhD, University of Cambridge, 1984

Yvette Marie Dechavez, Lecturer English PhD, University of Texas at Austin, 2017

John Deigh, Professor Philosophy PhD, University of California-Los Angeles, 1979

Kathleen Deiters, Assistant Professor-ROTC Air Force Science MS, University of Louisville, 2015

Lina Maria Del Castillo, Assistant Professor History PhD, University of Miami, 2007

Yvon Delville, Professor Psychology PhD, University of Massachusetts, 1992

James R Denbow, Professor Anthropology PhD, Indiana University at Bloomington, 1983

Joshua Dever, Professor Philosophy PhD, University of California-Berkeley, 1998

Anthony F Di Fiore, Professor Anthropology PhD, University of California-Davis, 1997

Yoav Di-Capua, Associate Professor History PhD, Princeton University, 2004

Rasha Diab, Associate Professor English Middle Eastern Studies Rhetoric and Writing PhD, University of Wisconsin-Madison, 2009

Natalie G Diaz English MFA, Old Dominion University, 2007

Randy L Diehl, Professor

David Bruton, Jr. Regents Chair in Liberal Arts Psychology PhD, University of Minnesota-Twin Cities, 1975

Eric M Dieter, Lecturer Rhetoric and Writing PhD, University of Texas at Austin, 2013

Henry A Dietz, Professor Emeritus Government Latin American Studies PhD, Stanford University, 1975

Andrew P Dillon, Professor Vara Martin Daniel Regents Professorship in Libraries, Archives & Information Studies Psychology PhD, Loughborough University, 1991

Diana M Dinitto, Professor Cullen Trust Centennial Professorship in Alcohol Studies and Education Women's and Gender Studies PhD, Florida State University, 1980

Robert A Divine, Professor Emeritus History PhD, Yale University, 1954

Sinan Dogramaci, Associate Professor Philosophy PhD, New York University, 2009

Brian F Doherty, Senior Lecturer English PhD, University of Wisconsin-Milwaukee, 1996

Juan M Dominguez, Associate Professor Psychology PhD, State University of New York at Buffalo, 2002

Hect Dominguez-Ruvalcaba, Professor Spanish and Portuguese Women's and Gender Studies PhD, University of Colorado at Boulder, 1999

Michael P Domjan, Professor Psychology PhD, McMaster University, 1973

Wendy I Domjan, Distinguished Senior Lecturer Psychology PhD, University of Wisconsin-Madison, 1977

Stephen Donald, Professor Edward Everett Hale Centennial Professorship in Economics PhD, University of British Columbia, 1990

William Doolittle, Professor Erich W. Zimmermann Regents Professorship in Geography Geography and the Environment PhD, University of Oklahoma Norman Campus, 1979

Robin W Doughty, Professor Emeritus Geography and the Environment PhD, University of California-Berkeley, 1971

Carolyn P Dunlap, Lecturer Spanish and Portuguese

#### PhD, University of Texas at Austin, 2000

Katherine Laura Dunlop, Associate Professor Philosophy PhD, University of California-Los Angeles, 2005

Joseph E Dunsmoor Jr, Clinical Assistant Professor Psychology PhD, Duke University, 2012

Emily D Durden, Lecturer Sociology PhD, University of Texas at Austin, 2006

Richard Dusansky, Professor Richard J. Gonzalez Regents Chair in Economic Progress Based on Freedom and Private Enterprise Economics PhD, Brown University, 1969

Christine L Duvauchelle, Associate Professor Psychology PhD, University of California-Santa Barbara, 1991

David J Eaton, Professor Bess Harris Jones Centennial Professorship in Natural Resource Policy Studies Geography and the Environment Middle Eastern Studies Middle Eastern Studies Ctr PhD, Johns Hopkins University, 1977

Maria Luisa Echavarria, Lecturer Spanish and Portuguese PhD, University of Texas at Austin, 2014

Catharine H Echols, Associate Professor Psychology PhD, University of Illinois at Urbana-Champaign, 1987

David V Edwards, Professor Emeritus Government PhD, Harvard University, 1966

Ryan Edwards Naval Science BA, University of Wisconsin-Milwaukee, 2009

Iris Ma Eisenman, Lecturer Asian Studies PhD, University of California-Los Angeles, 2016

Jules R Elkins, Lecturer Geography and the Environment PhD, University of California-Berkeley, 2008

Zachary S Elkins, Associate Professor Government PhD, University of California-Berkeley, 2003

James M Enelow, Professor Government PhD, University of Rochester, 1977

Nora C England, Professor Dallas TACA Centennial Professorship in the Humanities Anthropology Latin American Studies Linguistics PhD, University of Florida, 1975

Stephen Crossley Enniss, Adjunct Professor English PhD, University of Georgia, 1996

Derek Epp, Assistant Professor Government PhD, University of North Carolina at Chapel Hill, 2015

Patience L Epps, Professor Linguistics PhD, University of Virginia, 2005

Katrin E Erk, Associate Professor Linguistics PhD, Saarland University, 2002

Veit F Erlmann, Professor History of Music Chair Anthropology PhD, University of Cologne, 1978

Christopher Ernst, Lecturer History PhD, University of Toronto, 2011

Stefano M Eusepi, Associate Professor Economics PhD, University of Warwick, 2004

Jacqueline Josephine Evans, Lecturer Psychology PhD, University of Texas at Austin, 2011

Matthew L Evans, Associate Professor Philosophy PhD, University of Texas at Austin, 2004

Rhonda L Evans, Senior Lecturer Government PhD, University of Texas at Austin, 2004

Karen J Ewing, Lecturer Germanic Studies MA, University of Texas at Austin, 2001

Lester L Faigley, Professor Emeritus English Rhetoric and Writing Rhetoric and Writing PhD, University of Washington - Seattle, 1976

Toni L Falbo, Professor Sociology PhD, University of California-Los Angeles, 1973

Oloruntoyin O Falola, Professor Jacob and Frances Sanger Mossiker Chair in the Humanities #2 African and African Diaspora Studies African and African Diaspora Studies History PhD, Obafemi Awolowo University, 1981

Caroline V Faria, Assistant Professor African and African Diaspora Studies Geography and the Environment Women's and Gender Studies

# PhD, University of Washington - Seattle, 2009

Ashley Farmer, Assistant Professor African and African Diaspora Studies History PhD, Harvard University, 2013

Norman K Farmer Jr, Professor Emeritus English PhD, University of Pennsylvania, 1966

John P Farrell, Professor Emeritus English PhD, Indiana University at Bloomington, 1967

Mark D Feldman, Lecturer Economics PhD, University of California-Davis, 1982

Paul Ferrari, Research Associate Professor Psychology PhD, Florida Atlantic University, 2009

Linda Ferreira-Buckley, Associate Professor English Rhetoric and Writing PhD, University of Pennsylvania, 1990

Michael G Findley, Professor Government PhD, University of Illinois at Urbana-Champaign, 2007

Karen L Fingerman, Professor Psychology PhD, University of Michigan-Ann Arbor, 1993

Stephen E Finn, Clinical Associate Professor Psychology PhD, University of Minnesota-Twin Cities, 1984

Kirsten Cather, Associate Professor Asian Studies PhD, University of California-Berkeley, 2004

Vivian Flanzer, Senior Lecturer Spanish and Portuguese MA, Universidade Federal do Rio de Janeiro, 1994

Elizabeth Ann Florea, Lecturer French and Italian MA, Middlebury College, 2008

Richard R Flores, Professor C. B. Smith, Sr. Centennial Chair in United States-Mexico Relations #3 Anthropology PhD, University of Texas at Austin, 1989

Betty M Flowers, Professor Emeritus English PhD, University of London, 1973

George A Floyd, Associate Professor-ROTC Naval Science MPH, University of Hawaii at Manoa, 2001

William E Forbath, Professor Lloyd M. Bentsen Chair in Law History JD, Yale University, 1983 George B Forgie, Associate Professor History PhD, Stanford University, 1972

Kevin M Foster, Associate Professor African and African Diaspora Studies African and African Diaspora Studies Anthropology PhD, University of Texas at Austin, 2001

Marie E Fournier, Lecturer French and Italian MA, Universite Paul Valery, Montpellier III, 2017

Sarah N Frank, Lecturer English Rhetoric and Writing PhD, University of Texas at Austin, 2017

Maria Franklin, Associate Professor African and African Diaspora Studies African and African Diaspora Studies Anthropology PhD, University of California-Berkeley, 1997

Alison K Frazier, Associate Professor French and Italian History Religious Studies PhD, Columbia University in the City of New York, 1996

Gary P Freeman, Professor Emeritus Government PhD, University of Wisconsin-Madison, 1975

Oliver Freiberger, Associate Professor Asian Studies Religious Studies PhD, Georg-August Universitat Gottingen, 1999

Joshua Frens-String, Assistant Professor History PhD, New York University, 2015

Eric D Frey, Clinical Assistant Professor Psychology PhD, Texas Tech University, 1999

Daniel G Fridman, Assistant Professor Latin American Studies Sociology PhD, Columbia University in the City of New York, 2010

Alan W Friedman, Professor Arthur J. Thaman and Wilhelmina Dore' Thaman Endowed Professorship in English #3 English PhD, University of Rochester, 1966

Steven J Friesen, Professor The Louise Farmer Boyer Chair in Biblical Studies Religious Studies PhD, Harvard University, 1990

Adria Frizzi, Lecturer French and Italian PhD, Pennsylvania State University Main Campus, 1988 Penelope F Frohlich, Clinical Assistant Professor Psychology PhD, University of Texas at Austin, 2003

Kim Fromme, Professor Psychology PhD, University of Washington - Seattle, 1988

Kirkland A Fulk, Assistant Professor Germanic Studies PhD, University of North Carolina at Chapel Hill, 2013

Kelly Fulton, Lecturer Sociology PhD, University of Texas at Austin, 2004

Laura J Furman, Professor Emeritus English BA, Bennington College, 1968

James K Galbraith, Professor Lloyd M. Bentsen, Jr. Chair in Government/Business Relations Government PhD, Yale University, 1981

Omer R Galle, Professor Emeritus Sociology PhD, University of Chicago, 1968

Patricia M Garcia, Lecturer English PhD, Texas A & M University, 2006

Seth W Garfield, Professor History Latin American Studies PhD, Yale University, 1996

James D Garrison, Professor Emeritus English PhD, University of California-Berkeley, 1972

Eugene Garver, Other University Affiliate Rhetoric and Writing PhD, University of Chicago, 1973

Thomas J Garza, Associate Professor Slavic and Eurasian Studies EdD, Harvard University, 1987

Bertram Gawronski, Professor Psychology PhD, Humboldt Universitat zu Berlin, 2001

Wilson S Geisler III, Professor David Wechsler Regents Chair in Psychology Psychology PhD, Indiana University at Bloomington, 1975

Vincent J Geraci, Professor Emeritus Economics PhD, University of Wisconsin-Madison, 1974

John Gerring, Professor Government PhD, University of California-Berkeley, 1993

Michael L Geruso, Assistant Professor Economics PhD, Princeton University, 2012

Mohammad Ghanoonparvar, Professor Emeritus Middle Eastern Studies PhD, University of Texas at Austin, 1979

Zulfikar A Ghose, Professor Emeritus English BA, Keele University, 1959

David L Gilden, Professor Psychology PhD, University of Texas at Austin, 1982

Lyndon K Gill, Assistant Professor African and African Diaspora Studies African and African Diaspora Studies PhD, Harvard University, 2010

Kate Gillespie, Associate Professor Middle Eastern Studies Middle Eastern Studies Ctr PhD, University of London, 1983

William P Glade, Professor Emeritus Economics PhD, University of Texas at Austin, 1955

Jennifer Glass, Professor Centennial Commission Professorship in the Liberal Arts #4 Sociology PhD, University of Wisconsin-Madison, 1983

Andrew Stephen Glover, Assistant Professor Economics PhD, University of Minnesota-Twin Cities, 2011

Diana Gomez-Vazquez, Lecturer Spanish and Portuguese MT, Universidad de Navarra, 2012

Rueben A Gonzales, Professor Jacques P. Servier Regents Professorship in Pharmacy Psychology PhD, University of Texas at Austin, 1983

John M Gonzalez, Professor English PhD, Stanford University, 1998

F Gonzalez-Lima, Professor George I. Sanchez Centennial Professorship in Liberal Arts Psychology PhD, University of Pr Medical Sciences, 1980

Gloria Gonzalez-Lopez, Professor Sociology Women's and Gender Studies PhD, University of Southern California, 2000

Lalitha Gopalan, Associate Professor Asian Studies PhD, University of Rochester, 1993

Edmund T Gordon, Associate Professor African and African Diaspora Studies African and African Diaspora Studies Anthropology

# PhD, Stanford University, 1981

Andrea C Gore, Professor Mildred Hajek Vacek and John Roman Vacek Chair in Pharmacology, in Honor of Professor C. C. Albers Psychology PhD, University of Wisconsin-Madison, 1990

Robbe L Goris, Assistant Professor Psychology PhD, Katholieke Universiteit Leuven, 2009

Samuel D Gosling, Professor Psychology PhD, University of California-Berkeley, 1998

Itzik Gottesman, Senior Lecturer Germanic Studies Jewish Studies PhD, University of Pennsylvania, 1993

Philip B Gough, Professor Emeritus Psychology PhD, University of Minnesota-Twin Cities, 1961

Lewis L Gould, Professor Emeritus History PhD, Yale University, 1966

Jennifer Graber, Associate Professor Religious Studies PhD, Duke University, 2006

Don B Graham, Professor J. Frank Dobie Regents Professorship in American and English Literature English PhD, University of Texas at Austin, 1971

Lawrence S Graham, Professor Emeritus Government PhD, University of Florida, 1965

Richard Graham, Professor Emeritus History PhD, University of Texas at Austin, 1961

Samuel S Graham, Assistant Professor Rhetoric and Writing PhD, Iowa State University, 2010

Richard B Grant, Professor Emeritus French and Italian PhD, Harvard University, 1952

Laurie B Green, Associate Professor African and African Diaspora Studies History Women's and Gender Studies PhD, University of Chicago, 1999

Penny A Green, Senior Lecturer Sociology PhD, University of Texas at Austin, 1986

Rachel Elizabeth Green, Lecturer Middle Eastern Studies PhD, University of Texas at Austin, 2017

Terrance L Green, Assistant Professor

African and African Diaspora Studies PhD, University of Wisconsin-Madison, 2013

Kenneth F Greene, Associate Professor Government PhD, University of California-Berkeley, 2002

Benjamin G Gregg, Associate Professor Government PhD, Princeton University, 1996

Zenzi M Griffin, Professor Linguistics Psychology PhD, University of Illinois at Urbana-Champaign, 1998

Jonathan Grossman, Lecturer Jewish Studies MA, Hebrew University, 2012

Karen Grumberg, Associate Professor Middle Eastern Studies Middle Eastern Studies Ctr PhD, University of California-Los Angeles, 2004

Sumit Guha, Professor Frances Higginbotham Nalle Centennial Professorship in History Asian Studies History PhD, University of Cambridge, 1982

Nicole Marie Guidotti-Hernandez, Associate Professor American Studies Women's and Gender Studies PhD, Cornell University, 2004

Nancy C Guilloteau, Senior Lecturer French and Italian PhD, University of Texas at Austin, 1997

Lauren E Gulbas, Assistant Professor Anthropology PhD, Southern Methodist University, 2008

Joshua G Gunn, Associate Professor Rhetoric and Writing PhD, University of Minnesota-Twin Cities, 2002

Andrea D Gustavson, Lecturer American Studies PhD, University of Texas at Austin, 2015

Lauren Jae Gutterman, Assistant Professor American Studies History PhD, New York University, 2012

David A Haase, Professor-ROTC Air Force Science MS, National Defense University, 2008

James T Hackett Sr, Lecturer MTS, Harvard University, 2016

Jo Ann Hackett, Professor Middle Eastern Studies Middle Eastern Studies Ctr Religious Studies

#### PhD, Harvard University, 1980

Hossein Haghshenas, Senior Lecturer Sociology PhD, University of Texas at Austin, 1991

Sabine Hake, Professor Texas Chair of German Literature and Culture Geography and the Environment Germanic Studies Women's and Gender Studies PhD, Universitat Hannover, 1984

Charles R Hale, Professor African and African Diaspora Studies African and African Diaspora Studies Anthropology PhD, Stanford University, 1990

Andreana P Haley, Associate Professor Psychology PhD, University of Virginia, 2005

Michael G Hall, Professor Emeritus History PhD, Johns Hopkins University, 1956

Harold William Hamblet Jr, Assistant Professor-ROTC Military Science MA, American Public University System, 2016

Daniel S Hamermesh, Professor Emeritus Economics PhD, Yale University, 1969

Kamal Hamidieh, Lecturer Economics PhD, University of Michigan-Ann Arbor, 2008

Sukjin Han, Assistant Professor Economics PhD, Yale University, 2012

Ian F Hancock, Professor Harold C. and Alice T. Nowlin Regents Professorship in Liberal Arts English Linguistics PhD, University of London, 1971

Courtney Handman, Assistant Professor Anthropology PhD, University of Chicago, 2010

Robert J Hankinson, Professor Philosophy PhD, University of Cambridge, 1985

Kathryn G Hansen, Professor Emeritus Asian Studies PhD, University of California-Berkeley, 1978

Niles M Hansen, Professor Emeritus Economics PhD, Indiana University at Bloomington, 1963

Kathryn Paige Harden, Associate Professor Psychology PhD, University of Virginia, 2009 Robert L Hardgrave, Professor Emeritus Government PhD, University of Chicago, 1966

Julie Hardwick, Professor History PhD, Johns Hopkins University, 1991

Michael P Harney, Professor Spanish and Portuguese PhD, University of California-Berkeley, 1983

Louis Harrison, Professor Charles H. Spence, Sr. Centennial Professorship in Education African and African Diaspora Studies African and African Diaspora Studies PhD, Louisiana State University and Agricultural and Mechanical College, 1997

Roderick P Hart, Professor Allan Shivers Centennial Chair in Communication Government PhD, Pennsylvania State University Park, 1970

John Hartigan, Professor Anthropology PhD, University of California-Santa Cruz, 1995

Jonathan Edward Carey Harvey, Associate Professor English BA, University of Hull, 1989

Shahnaz Hassan, Senior Lecturer Asian Studies BA, University of the Punjab, 1989

Junko Hatanaka, Lecturer Asian Studies MA, University of Wisconsin-Madison, 1998

John William Hatfield, Professor Economics PhD, Stanford University, 2005

Raymond C Hawkins II, Clinical Assistant Professor Psychology PhD, University of Pennsylvania, 1975

Satoru Hayasaka, Clinical Associate Professor Psychology PhD, University of Michigan-Ann Arbor, 2003

Mary M Hayhoe, Professor Psychology PhD, University of California-San Diego, 1979

Mark D Hayward, Professor Sociology Women's and Gender Studies PhD, Indiana University at Bloomington, 1981

Elizabeth A Hedrick, Associate Professor English PhD, Columbia University in the City of New York, 1986

Hubert P Heinen, Professor Emeritus Germanic Studies PhD, University of Texas at Austin, 1964 Kurt O Heinzelman, Professor English PhD, University of Massachusetts, 1978

Susan S Heinzelman, Associate Professor English Women's and Gender Studies PhD, University of Western Ontario, 1978

Marlone D Henderson, Associate Professor Psychology PhD, New York University, 2006

Geraldine Heng, Associate Professor English Middle Eastern Studies Ctr Women's and Gender Studies PhD, Cornell University, 1990

Jacqueline M Henkel, Associate Professor English Rhetoric and Writing PhD, University of Minnesota-Twin Cities, 1985

Clement M Henry, Professor Emeritus Government PhD, Harvard University, 1963

Nicholas A Henry, Assistant Professor Germanic Studies PhD, Pennsylvania State University Park, 2015

Frederick G Hensey, Professor Emeritus Spanish and Portuguese PhD, University of Texas at Austin, 1967

James R Henson, Lecturer Government PhD, University of Texas at Austin, 1996

Peter Hess, Associate Professor European Studies Germanic Studies PhD, University of Michigan-Ann Arbor, 1984

Thomas R Hester, Professor Emeritus Anthropology PhD, University of California-Berkeley, 1972

Richard Heyman, Lecturer Geography and the Environment PhD, University of Washington - Seattle, 2004

Wayne R Hickenbottom, Senior Lecturer Economics PhD, University of Minnesota-Twin Cities, 1992

Virginia Higginbotham, Associate Professor Emeritus Spanish and Portuguese PhD, Tulane University, 1966

Kathleen M Higgins, Professor Philosophy PhD, Yale University, 1982

John C Higley, Professor Emeritus Government PhD, University of Connecticut, 1968 Angela Hill, Other University Affiliate Rhetoric and Writing PhD, University of California-Berkeley, 2011

Michael C Hillmann, Professor Middle Eastern Studies Middle Eastern Studies Ctr PhD, University of Chicago, 1974

Robin Hilsabeck Psychology PhD, Louisiana State University and Agricultural and Mechanical College, 1999

Heather Hindman, Associate Professor Anthropology Asian Studies PhD, University of Chicago, 2003

R Roland Hinojosasmith, Professor Emeritus English PhD, University of Illinois at Urbana-Champaign, 1969

Lars Hinrichs, Associate Professor English PhD, Albert Ludwig University Freiburg im Breisgau, 2006

John G Hixon, Lecturer Psychology PhD, University of Texas at Austin, 1991

Neville Hoad, Associate Professor English Women's and Gender Studies PhD, Columbia University in the City of New York, 1998

John M Hoberman, Professor Germanic Studies PhD, University of California-Berkeley, 1975

Herbert I Hochberg, Professor Emeritus Philosophy PhD, University of Iowa, 1954

Steven D Hoelscher, Professor American Studies Geography and the Environment PhD, University of Wisconsin-Madison, 1995

Carole K Holahan, Professor Psychology PhD, University of Texas at Austin, 1976

Charles J Holahan, Professor Psychology PhD, University of Massachusetts, 1971

Stephanie S Holmsten, Lecturer Government PhD, University of Texas at Austin, 2012

Wayne H Holtzman, Professor Emeritus Psychology PhD, Stanford University, 1950

Robert K Holz, Professor Emeritus African and African Diaspora Studies Geography and the Environment Middle Eastern Studies Ctr

# PhD, Michigan State University, East Lansing, 1963

Antony G Hopkins, Professor Emeritus History PhD, University of London, 1964

Joseph M Horn, Professor Emeritus Psychology PhD, University of Minnesota-Twin Cities, 1969

Roy D Horovitz, Lecturer Jewish Studies MA, Tel Aviv University, 2004

Stephanie Ann Houghton Economics PhD, Duke University, 2008

Heather Houser, Associate Professor English PhD, Stanford University, 2010

Camilla H Hsieh, Senior Lecturer Asian Studies PhD, University of Texas at Austin, 1995

Madeline Y Hsu, Professor Asian Studies History PhD, Yale University, 1996

John Huehnergard, Professor Emeritus Middle Eastern Studies PhD, Harvard University, 1979

Alexander C Huk, Professor Psychology PhD, Stanford University, 2001

Bruce J Hunt, Associate Professor History PhD, Johns Hopkins University, 1984

Wendy A Hunter, Professor Government PhD, University of California-Berkeley, 1992

Leslie L Hussey, Lecturer Linguistics MA, Gallaudet University, 1998

Coleman Hutchison, Associate Professor English PhD, Northwestern University, 2006

Syed A Hyder, Associate Professor Asian Studies Middle Eastern Studies Ctr PhD, Harvard University, 2000

Amy Louise Hyne-Sutherland, Lecturer Asian Studies PhD, University of Texas at Austin, 2015

Robert Icenhauer-Ramirez, Lecturer History PhD, University of Texas at Austin, 2014

Devrim Ikizler, Lecturer Economics PhD, University of Texas at Austin, 2011

William Inboden, Associate Professor History PhD, Yale University, 2003

Yasmiyn Irizarry Murphy, Assistant Professor African and African Diaspora Studies Sociology PhD, Indiana University at Bloomington, 2011

Mbemba Jabbi, Clinical Assistant Professor Psychology PhD, University of Groningen, 2007

Gary J Jacobsohn, Professor H. Malcolm Macdonald Chair in Constitutional and Comparative Law Government PhD, Cornell University, 1972

F Tomasson Jannuzi, Professor Emeritus Economics PhD, University of London, 1958

Jonathan H Jarvis, Lecturer Anthropology MS, Mississippi State University, 2012

Jody L Jensen, Professor Psychology PhD, University of Maryland College Park, 1989

Nathan Michael Jensen, Professor Government PhD, Yale University, 2002

Robert W Jensen, Professor E. M. "Ted" Dealey Professorship in the Business of Journalism Women's and Gender Studies PhD, University of Minnesota-Twin Cities, 1992

Jiwon Jeon, Lecturer Sociology PhD, University of Wisconsin-Madison, 1992

Stephen A Jessee, Associate Professor Government PhD, Stanford University, 2007

Monica A Jimenez, Assistant Professor African and African Diaspora Studies History PhD, University of Texas at Austin, 2015

Patricia S Johansson, Lecturer Germanic Studies MA, University of Texas at Austin, 2010

Jane A Johnson, Senior Lecturer Spanish and Portuguese PhD, University of Texas at Austin, 1996

Barbara L Jones, Professor Women's and Gender Studies PhD, State University of New York at Albany, 2004

Bryan D Jones, Professor J. J. "Jake" Pickle Regents Chair in Congressional Studies Government PhD, University of Texas at Austin, 1970

Claire C Jones, Lecturer French and Italian PhD, University of Texas at Austin, 2013

Jacqueline Jones, Professor Mastin Gentry White Professorship in Southern History History PhD, University of Wisconsin-Madison, 1976

Omi Osun Joni L Jones, Professor African and African Diaspora Studies African and African Diaspora Studies PhD, New York University, 1993

Kelly E Jones, Clinical Assistant Professor Psychology PhD, Drexel University, 2013

Theresa A Jones, Professor Psychology PhD, University of Texas at Austin, 1992

Bella B Jordan, Lecturer Slavic and Eurasian Studies PhD, University of Texas at Austin, 2002

Marcelo Jorge De Paula Paixao, Associate Professor African and African Diaspora Studies PhD, Instituto Universitario de Pesquisas do Rio De Janeiro, 2005

Peniel E Joseph, Professor Barbara Jordan Chair in Ethics and Political Values History PhD, Temple University, 2000

Robert A Josephs, Professor Psychology PhD, University of Michigan-Ann Arbor, 1990

Cory F Juhl, Professor Philosophy PhD, University of Pittsburgh, Pittsburgh Campus, 1992

Lee Ann Kahlor, Associate Professor Women's and Gender Studies PhD, University of Wisconsin-Madison, 2003

Neil D Kamil, Associate Professor History PhD, Johns Hopkins University, 1989

Johan A Kamp, Visiting Professor Linguistics Philosophy PhD, University of California-Los Angeles, 1968

Jeffrey S Kane, Lecturer Sociology MD, University of Texas Southwestern Medical Center at Dallas, 1995

Robert H Kane, Professor Emeritus Philosophy PhD, Yale University, 1964

Jonathan Kaplan, Assistant Professor Middle Eastern Studies PhD, Harvard University, 2010 John W Kappelman Jr, Professor Anthropology PhD, Harvard University, 1987

Akemi Katayama, Lecturer Asian Studies MA, University of Alberta, 2012

Cheryl L Kaufman, Lecturer History PhD, University of Texas at Austin, 2011

Parviz K Kavoussi, Adjunct Assistant Professor Psychology MD, Baylor College of Medicine, 2002

Hana Kawashima Ransom, Lecturer Asian Studies MA, University of Texas at Austin, 1993

James Charles Kearney, Lecturer Germanic Studies PhD, University of Texas at Austin, 2010

Elizabeth L Keating, Professor Anthropology Linguistics PhD, University of California-Los Angeles, 1994

Ward W Keeler, Associate Professor Anthropology PhD, University of Chicago, 1982

William R Kelly, Professor Sociology PhD, Indiana University at Bloomington, 1979

Orlando R Kelm, Associate Professor Spanish and Portuguese PhD, University of California-Berkeley, 1989

David A Kendrick, Professor Emeritus Economics PhD, Massachusetts Institute of Technology, 1966

Martin W Kevorkian, Professor English PhD, University of California-Los Angeles, 2000

William W Kibler, Professor Emeritus French and Italian PhD, University of North Carolina at Chapel Hill, 1968

Eun Joo Kim, Lecturer Asian Studies BA, Ewha Women's University, 1997

Su Yeong Kim, Associate Professor Women's and Gender Studies PhD, University of California-Davis, 2003

Sara E Kimball, Associate Professor English PhD, University of Pennsylvania, 1983

Troy M Kimmel Jr, Senior Lecturer Geography and the Environment BS, Texas A & M University, 1983

Bradley R King, Lecturer

English PhD, University of Texas at Austin, 2014

Robert D King, Professor Emeritus Linguistics PhD, University of Wisconsin-Madison, 1965

Edward C Kirk, Professor Anthropology PhD, Duke University, 2003

Brendan Andrew Kline, Assistant Professor Economics PhD, Northwestern University, 2012

Gregory W Knapp, Associate Professor Geography and the Environment PhD, University of Wisconsin-Madison, 1984

Dale A Koike, Professor Spanish and Portuguese PhD, University of New Mexico Main Campus, 1981

Jill Kolasinski, Lecturer BA, Northwestern University, 1994

John S Kolsti, Professor Emeritus Slavic and Eurasian Studies PhD, Harvard University, 1968

Robert C Koons, Professor Philosophy PhD, University of California-Los Angeles, 1987

David D Kornhaber, Associate Professor Thomas Mabry Cranfill Lectureship in English English PhD, Columbia University in the City of New York, 2009

Donna Marie Kornhaber, Associate Professor English PhD, Columbia University in the City of New York, 2009

David E Koss, Professor-ROTC Naval Science MA, National Defense University, 2013

Charles A Krecz, Senior Lecturer Philosophy PhD, University of Texas at Austin, 1975

Joseph E Kruppa, Professor Emeritus English PhD, Johns Hopkins University, 1964

Shanti Kumar, Associate Professor Asian Studies PhD, Indiana University at Bloomington, 1987

Patricia Joann Kyle, Lecturer French and Italian PhD, Indiana University at Bloomington, 1991

Francois P Lagarde, Associate Professor Emeritus French and Italian PhD, Stanford University, 1985

Chiu-Mi Lai, Distinguished Senior Lecturer Asian Studies PhD, University of Washington - Seattle, 1990

Knud P Lambrecht, Professor Emeritus French and Italian PhD, University of California-Berkeley, 1986

John E Lamphear, Professor Emeritus History PhD, University of London, 1972

Brent Landau, Lecturer Religious Studies ThD, Harvard University, 2008

Judith H Langlois, Professor Charles and Sarah Seay Regents Professorship in Developmental Psychology Psychology PhD, Louisiana State University and Agricultural and Mechanical College, 1973

Elayne L Lansford, Clinical Assistant Professor Psychology PhD, University of Michigan-Ann Arbor, 1982

Richard W Lariviere, Professor Emeritus Asian Studies PhD, University of Pennsylvania, 1978

Peter N Lasalle, Professor Susan Taylor McDaniel Regents Professorship in Creative Writing #2 English MA, University of Chicago, 1972

Clarence G Lasby, Professor Emeritus History PhD, University of California-Los Angeles, 1962

Edgardo M Latrubesse, Professor Raymond Dickson Centennial Professorship #1 Geography and the Environment PhD, National University of San Luis, 1992

Barbara Laubenthal, Adjunct Associate Professor Germanic Studies PhD, Justus Liebig University Giessen, 2006

Daniel A Law, Assistant Professor Linguistics PhD, University of Texas at Austin, 2011

Mark A Lawrence, Associate Professor History PhD, Yale University, 1998

William Lawson, Professor Psychology MD, University of Chicago, 1978

David L Leal, Professor Government PhD, Stanford University, 1998

Hongjoo J Lee, Associate Professor Psychology PhD, Yale University, 2002

Cristine H Legare, Associate Professor Psychology PhD, University of Michigan-Ann Arbor, 2008

Jeffrey C Leon, Lecturer Philosophy PhD, University of Texas at Austin, 1993

Kari Rene Nations, Clinical Assistant Professor Psychology PhD, University of Texas at Austin, 2002

Janice Leoshko, Associate Professor Asian Studies PhD, Ohio State U Main Campus, 1987

Brian P Levack, Professor Emeritus History PhD, Yale University, 1969

Philippa Judith Levine, Professor Walter Prescott Webb Chair in History and Ideas History Women's and Gender Studies PhD, University of Oxford, 1984

Sanford V Levinson, Professor W. St. John Garwood and W. St. John Garwood, Jr. Centennial Chair in Law Government JD, Stanford University, 1973

Marc S Lewis, Associate Professor Psychology PhD, University of Cincinnati Main Campus, 1973

Randolph R Lewis, Professor American Studies Anthropology PhD, University of Texas at Austin, 1994

Rebecca J Lewis, Associate Professor Anthropology PhD, Duke University, 2004

Jarrod Alan Lewis-Peacock, Assistant Professor Psychology PhD, University of Wisconsin-Madison, 2010

Huaiyin Li, Professor Asian Studies History PhD, University of California-Los Angeles, 2000

Junyi Li, Assistant Professor Linguistics PhD, University of Pennsylvania, 2017

Tatjana Lichtenstein, Associate Professor History Jewish Studies Slavic and Eurasian Studies PhD, University of Toronto, 2009

Harold A Liebowitz, Professor Emeritus Middle Eastern Studies PhD, University of Pennsylvania, 1972

Vladimir Lifschitz, Professor Professorship in Computer Sciences #2 Philosophy PhD, Steklov Mathematical Institute, 1969

Jose E Limon, Professor Emeritus English PhD, University of Texas at Austin, 1978

Ken-Hou Lin, Assistant Professor Sociology PhD, University of Massachusetts, 2013

Tse-Min Lin, Associate Professor Government PhD, University of Minnesota-Twin Cities, 1990

Yi-Chun Lin, Lecturer Asian Studies MA, National Taiwan University, 2010

Bjorn E Lindblom, Professor Emeritus Linguistics PhD, Lund University, 1968

Leigh L Linden, Associate Professor Economics Women's and Gender Studies PhD, Massachusetts Institute of Technology, 2004

Bernth O Lindfors, Professor Emeritus English PhD, University of California-Los Angeles, 1969

Naomi E Lindstrom, Professor Gale Family Foundation Professorship in Jewish Arts and Culture Jewish Studies Spanish and Portuguese PhD, Arizona State University Main, 1974

Katherine Cecilia Lippa, Lecturer Psychology PhD, Wright State University Main Campus, 2016

Elizabeth Thomas Cox Lippard, Clinical Assistant Professor Psychology PhD, University of North Carolina at Chapel Hill, 2012

Jane N Lippmann, Professor Emeritus French and Italian PhD, University of Illinois at Urbana-Champaign, 1965

Jon E Litland, Assistant Professor Philosophy PhD, Harvard University, 2012

Lily Litvak, Professor Emeritus Spanish and Portuguese PhD, University of California-Berkeley, 1972

Amy H Liu, Associate Professor Government PhD, Emory University, 2009

Xuecheng Liu, Visiting Associate Professor Government PhD, University of Texas at Austin, 1993

Yongfeng Liu, Lecturer Asian Studies MA, Texas A & M University, 2013

Xavier Livermon, Assistant Professor

African and African Diaspora Studies Women's and Gender Studies PhD, University of California-Berkeley, 2006

Keith A Livers, Associate Professor Slavic and Eurasian Studies PhD, University of Michigan-Ann Arbor, 1995

James N Loehlin, Professor Shakespeare at Winedale Regents Professorship English PhD, Stanford University, 1993

John C Loehlin, Professor Emeritus Psychology PhD, University of California-Berkeley, 1957

Mark G Longaker, Associate Professor English Rhetoric and Writing PhD, Pennsylvania State University Main Campus, 2003

Belem G Lopez, Assistant Professor Psychology PhD, Texas A & M University, 2015

Martita A Lopez, Clinical Professor Psychology PhD, Syracuse University Main Campus, 1977

Michael Lopez, Clinical Associate Professor MA, University of Texas - Pan American, 1991

William R Louis, Professor Mildred Caldwell and Baine Perkins Kerr Centennial Chair in English History and Culture, Jo Anne Christian Centennial Professorship in British Studies History Middle Eastern Studies Middle Eastern Studies Ctr PhD, University of Oxford, 1962

Bradley C Love Psychology PhD, Northwestern University, 1999

Xiaobo Lu, Assistant Professor Government PhD, Yale University, 2011

Marta E Lujan, Professor Emeritus Spanish and Portuguese PhD, University of Texas at Austin, 1972

Robert C Luskin, Associate Professor Government PhD, University of Michigan-Ann Arbor, 1983

Oksana Lutsyshyna, Lecturer Russian, East European, and Eurasian Studies PhD, University of Georgia, 2014

Edward A Macduffie III, Associate Professor English PhD, Harvard University, 2006

Carol H MacKay, Professor J. R. Millikan Centennial Professorship in English Literature English Women's and Gender Studies PhD, University of California-Los Angeles, 1979

Patricia Maclachlan, Associate Professor Asian Studies Government PhD, Columbia University in the City of New York, 1996

Rebecca Anne Macmillan, Lecturer English PhD, University of Texas at Austin, 2017

Peter F Macneilage, Professor Emeritus Psychology PhD, McGill University, 1962

Raul L Madrid, Professor Government PhD, Stanford University, 1999

Jennifer W Maedgen, Clinical Associate Professor Psychology PhD, University of Texas at Austin, 1998

Claire Maes, Postdoctoral Fellow Asian Studies PhD, Universiteit Gent, 2015

Stephen P Magee, Professor James L. Bayless/Enstar Corp. Chair in Business Administration Economics PhD, Massachusetts Institute of Technology, 1969

Anat Maimon, Lecturer Middle Eastern Studies BA, Tel Aviv University, 1984

Minkah Makalani, Associate Professor African and African Diaspora Studies African and African Diaspora Studies History PhD, University of Illinois at Urbana-Champaign, 2004

Madhavi Mallapragada, Associate Professor Asian Studies PhD, University of Wisconsin-Madison, 2003

Eric S Mallin, Associate Professor English PhD, Stanford University, 1986

Darsana Manayathu Sasi, Lecturer Asian Studies Asian Studies PhD, University of Kerala, 2013

Hannes Mandel, Lecturer Germanic Studies MA, Princeton University, 2012

Ian R Manners, Professor Emeritus Geography and the Environment PhD, University of Oxford, 1969

Sean Manning, Lecturer Spanish and Portuguese PhD, University of Texas at Austin, 2015

Dayanand Manoli, Assistant Professor

Economics PhD, University of California-Berkeley, 2008

Abraham Marcus, Associate Professor Emeritus History PhD, Columbia University in the City of New York, 1979

Mia K Markey, Professor Women's and Gender Studies PhD, Duke University, 2001

Arthur B Markman, Professor Annabel Irion Worsham Centennial Professorship in Liberal Arts Psychology PhD, University of Illinois at Urbana-Champaign, 1992

Anne C Marsh, Lecturer French and Italian MA, University of Texas at Austin, 1996

Ray Marshall, Professor Emeritus Economics PhD, University of California-Berkeley, 1954

Stephen H Marshall, Associate Professor African and African Diaspora Studies African and African Diaspora Studies American Studies PhD, Harvard University, 2002

Leticia J Marteleto, Associate Professor Sociology PhD, University of Michigan-Ann Arbor, 2001

Kristie M Martin, Clinical Assistant Professor BA, University of Texas at Austin, 1984

Alberto A Martinez, Professor History PhD, University of Minnesota-Twin Cities, 2001

Aloysius P Martinich, Professor Roy Allison Vaughan Centennial Professorship in Philosophy Government History Philosophy PhD, University of California-San Diego, 1973

Tracie M Matysik, Associate Professor History PhD, Cornell University, 2001

Alfred L McAlister, Adjunct Associate Professor PhD, Stanford University, 1976

Elizabeth McCracken, Professor James A. Michener Endowed Chair in Writing English MFA, University of Iowa, 1990

Anne M McCreary, Lecturer French and Italian PhD, University of Texas at Austin, 2014

Eric L Mcdaniel, Associate Professor African and African Diaspora Studies Government PhD, University of Illinois at Urbana-Champaign, 2004 Patrick J McDonald, Associate Professor Government PhD, Ohio State U Main Campus, 2002

Kelly McDonough, Assistant Professor Spanish and Portuguese PhD, University of Minnesota-Twin Cities, 2010

Dennis McFadden, Professor Emeritus Psychology PhD, Indiana University at Bloomington, 1967

Matthew S McGlone, Professor Women's and Gender Studies PhD, Princeton University, 1994

Maurie McInnis, Professor Jacob and Frances Sanger Mossiker Chair in the Humanities #1 American Studies PhD, Yale University, 1996

John McIver, Research Fellow Government PhD, Indiana University at Bloomington, 1986

Samuel D McLemore, Professor Emeritus Sociology PhD, Yale University, 1961

Mark McManis, Research Associate Professor Psychology PhD, University of Florida, 1996

Standish Meacham Jr, Professor Emeritus History PhD, Harvard University, 1961

Richard P Meier, Professor Robert D. King Centennial Professorship of Liberal Arts Linguistics Psychology PhD, University of California-San Diego, 1982

Jeffrey L Meikle, Professor Stiles Professorship in American Studies American Studies PhD, University of Texas at Austin, 1977

Jocelly Guie Meiners, Lecturer Spanish and Portuguese PhD, University of Texas at Austin, 2013

Mirna Mejia, Clinical Assistant Professor Psychology PhD, St John's University, 2002

Tina L Melcher, Clinical Associate Professor MS, Texas A & M University - Corpus Christi, 1999

Martha Menchaca, Professor Anthropology Women's and Gender Studies PhD, Stanford University, 1987

Sofian Merabet, Associate Professor Anthropology Middle Eastern Studies Middle Eastern Studies Ctr Women's and Gender Studies PhD, Columbia University in the City of New York, 2009

Cindy M Meston, Professor Psychology PhD, University of British Columbia, 1995

Vagdevi V Meunier, Clinical Assistant Professor Psychology PsyD, Antioch New England Graduate School, 1997

Thoralf Meyer, Lecturer Geography and the Environment PhD, University of Virginia, 2014

Julia L Mickenberg, Associate Professor American Studies Women's and Gender Studies PhD, University of Minnesota-Twin Cities, 2000

Aragorn Miller, Lecturer History PhD, University of Texas at Austin, 2012

Brooke J Miller, Lecturer Psychology PhD, University of Texas at Austin, 2016

Guy H Miller, Associate Professor Emeritus History PhD, University of Michigan-Ann Arbor, 1970

Jennifer A Miller, Associate Professor Geography and the Environment PhD, San Diego State University, 2003

Paul David Miller, Lecturer Government PhD, Georgetown University, 2010

Gail Minault, Professor Emeritus History PhD, University of Pennsylvania, 1972

Julie A Minich, Associate Professor English Women's and Gender Studies PhD, Stanford University, 2008

Steven Mintz, Professor History PhD, Yale University, 1979

Eugenio J Miravete, Professor Rex G. Baker, Jr., Professorship of Political Economy Economics PhD, Northwestern University, 1996

John Mirowsky, Professor Emeritus Sociology PhD, Yale University, 1981

Rodney Moag, Associate Professor Emeritus Asian Studies PhD, University of Wisconsin-Madison, 1973

Hans-Bernhard Moeller, Associate Professor Emeritus Germanic Studies PhD, University of Southern California, 1964

Mohammad A Mohammad, Associate Professor

Middle Eastern Studies Middle Eastern Studies Ctr PhD, University of Southern California, 1989

A Azfar Moin, Associate Professor History Religious Studies PhD, University of Michigan-Ann Arbor, 2010

Joseph J Moldenhauer, Professor Emeritus English PhD, Columbia University in the City of New York, 1964

Robert R Mollenauer, Associate Professor Emeritus Germanic Studies PhD, Indiana University at Bloomington, 1960

Sidney Monas, Professor Emeritus History PhD, Harvard University, 1955

Marie H Monfils, Associate Professor Psychology PhD, University of Lethbridge, 2005

Michelle Montague, Associate Professor Philosophy PhD, University of Colorado at Boulder, 2002

Delia L Montesinos, Senior Lecturer Spanish and Portuguese PhD, University of Texas at Austin, 2000

Jean-Pierre Montreuil, Professor Emeritus French and Italian PhD, University of Texas at Austin, 1977

Clif Moore, Clinical Assistant Professor Psychology PhD, University of Texas at Austin, 1993

Leonard N Moore, Professor George W. Littlefield Professorship in American History History PhD, Ohio State U Main Campus, 1998

Lisa L Moore, Professor Archibald A. Hill Regents Professorship in American and English Literature English Women's and Gender Studies PhD, Cornell University, 1991

Lorraine Leu, Associate Professor Spanish and Portuguese PhD, King's College, University of London, 2000

Pamela R Moore, Adjunct Assistant Professor Psychology PhD, Texas Tech University, 1991

Robin D Moore, Professor African and African Diaspora Studies African and African Diaspora Studies PhD, University of Texas at Austin, 1995

M G Morgan, Professor Emeritus History

# PhD, University of Exeter, 1962

Robert G Moser, Professor Government Slavic and Eurasian Studies PhD, University of Wisconsin-Madison, 1995

Michael W Mosser, Lecturer Government PhD, University of Wisconsin-Madison, 2002

Shalah M Mostashari, Lecturer Economics PhD, University of Texas at Austin, 2010

Alexander Mourelatos, Professor Emeritus Philosophy PhD, Yale University, 1964

Ahmad Muezzin, Lecturer Middle Eastern Studies MA, University of Wisconsin-Madison, 2017

Stephennie Mulder, Associate Professor Middle Eastern Studies Middle Eastern Studies Ctr PhD, University of Pennsylvania, 2008

Chandra L Muller, Professor Alma Cowden Madden Centennial Professorship Sociology PhD, University of Chicago, 1991

Karen M Mulligan, Lecturer Economics PhD, University of Texas at Austin, 2012

Gretchen Murphy, Professor English Women's and Gender Studies PhD, University of Washington - Seattle, 1999

Melissa D Murphy, Senior Lecturer Spanish and Portuguese PhD, University of Texas at Austin, 2008

Richard Murphy, Assistant Professor Economics PhD, University College London, 2014

Dhiraj Murthy, Associate Professor Sociology PhD, University of Cambridge, 2008

Marc A Musick, Professor Mike Hogg Professorship in Liberal Arts #2, Doyle Professorship in Western Civilization, Frank C. Erwin, Jr. Centennial Honors Professorship Sociology PhD, Duke University, 1997

Gulseren Mutlu, Lecturer Economics PhD, New York University, 2010

Scott P Myers, Professor Linguistics PhD, University of Massachusetts, 1987

Zoltan Nadasdy, Adjunct Assistant Professor

Psychology PhD, Rutgers the State University of New Jersey Newark Campus, 1999

Ian Michael Nauhaus, Assistant Professor Psychology PhD, University of California-Los Angeles, 2008

Curran J Nault, Lecturer Women's and Gender Studies PhD, University of Texas at Austin, 2013

A Rebecca Neal-Beevers, Research Associate Psychology PhD, University of Miami, 2002

James A Neely, Professor Emeritus Anthropology PhD, University of Arizona, 1974

Neil R Nehring, Associate Professor English PhD, University of Michigan-Ann Arbor, 1985

William R Nethercut, Professor Middle Eastern Studies Ctr PhD, Columbia University in the City of New York, 1963

Joan H Neuberger, Professor History Slavic and Eurasian Studies PhD, Stanford University, 1985

Mary C Neuburger, Professor History Middle Eastern Studies Ctr Slavic and Eurasian Studies PhD, University of Washington - Seattle, 1997

Irma C Nevarez, Lecturer Spanish and Portuguese MAEd, Instituto Tecnologico y de Estudios Superiores de Monterrey, 1998

Paula Ruth Newberg, Clinical Professor Government PhD, University of Chicago, 1990

Martha G Newman, Associate Professor History Religious Studies PhD, Stanford University, 1988

Hien V Nguyen, Associate Professor-ROTC Air Force Science MA, American Public University System, 2006

Klas Johan Olof Nilsson, Lecturer European Studies PhD, Lund University, 2017

Chiyo Nishida, Associate Professor Spanish and Portuguese PhD, University of Arizona, 1987

Linda Jeanne Noble, Professor Psychology PhD, University of California-Los Angeles, 1982

Angela M Nonaka, Assistant Professor Anthropology

# PhD, University of California-Los Angeles, 2007

Alfred L Norman, Professor Emeritus Economics PhD, University of Minnesota-Twin Cities, 1971

Fikile Nxumalo, Assistant Professor African and African Diaspora Studies PhD, University of Victoria, 2015

Shannon B O'Brien, Lecturer Government PhD, University of Florida, 2007

Aaron O'connell, Associate Professor History PhD, Yale University, 2009

Matthew S O'Neill Sr, Professor-ROTC Military Science MBA, Webster University, 2013

Gerald S Oettinger, Associate Professor Economics PhD, Massachusetts Institute of Technology, 1993

Guillermina Ogando Lavin, Lecturer Spanish and Portuguese MA, Universidad Antonio de Nebrija, 2002

Youjeong Oh, Assistant Professor Asian Studies PhD, University of California-Berkeley, 2013

Moyosore Benjamin Okediji, Professor African and African Diaspora Studies African and African Diaspora Studies PhD, University of Wisconsin Colleges, 1995

Jeannette Okur, Lecturer Middle Eastern Studies PhD, Ankara University, 2007

Benson P Oldmixon Air Force Science MBA, American Public University System, 2014

J P Olivelle, Professor Emeritus Asian Studies PhD, University of Pennsylvania, 1974

Antonella D Olson, Distinguished Senior Lecturer French and Italian Laurea, Universita degli Studi di Roma La Sapienza, 1978

Lisa Olstein, Associate Professor English MFA, University of Massachusetts, 2003

Robert A Olwell, Associate Professor History PhD, Johns Hopkins University, 1991

Robert M Oppenheim, Professor Anthropology Asian Studies PhD, University of Chicago, 2003

Stephanie L Osbakken, Lecturer Sociology PhD, University of Michigan-Ann Arbor, 2014

Cynthia Osborne, Associate Professor Women's and Gender Studies PhD, Princeton University, 2003

Lynette Osborne, Lecturer Sociology PhD, Purdue University Main Campus, 2006

David M Oshinsky, Professor Emeritus History PhD, Brandeis University, 1971

Abena Dove Agyepoma Osseo-Asare, Associate Professor History PhD, Harvard University, 2005

Yolanda C Padilla, Professor Women's and Gender Studies PhD, University of Michigan-Ann Arbor, 1993

Thomas G Palaima, Professor Robert M. Armstrong Centennial Professorship Middle Eastern Studies Ctr PhD, University of Wisconsin-Madison, 1980

Nina J Palmo, Lecturer Sociology PhD, University of Texas at Austin, 2015

Vivian Pan, Clinical Assistant Professor Psychology PhD, Fordham University, 2009

Nitya Pandalai-Nayar, Assistant Professor Economics PhD, University of Michigan-Ann Arbor, 2016

Lorraine S Pangle, Professor Government PhD, University of Chicago, 1999

Thomas L Pangle, Professor Joe R. Long Endowed Chair in Democratic Studies Government PhD, University of Chicago, 1972

Athanasio Papalexandrou, Associate Professor Middle Eastern Studies Ctr PhD, Princeton University, 1998

Kyung Park, Senior Lecturer Asian Studies MA, Yonsei University, 1995

Sang-Hoon Park, Lecturer Asian Studies PhD, University of Texas at Austin, 2007

Erica Tara Lily Parker, Lecturer Linguistics MA, University of California-San Diego, 2012

Na'ama Pat-El, Associate Professor Linguistics Middle Eastern Studies Middle Eastern Studies Ctr PhD, Harvard University, 2008 Stephanie Paulos, Clinical Assistant Professor Psychology PhD, University of Texas at Austin, 2007

Miguel A Pavon, Adjunct Professor Geography and the Environment MSEnvironE, Instituto Tecnologico y de Estudios Superiores de Monterrey, 1995

Pamela Marie Paxton, Professor Linda K. George and John Wilson Professorship Sociology PhD, University of North Carolina at Chapel Hill, 1998

Antonella C Pease, Associate Professor Emeritus French and Italian Laurea, University of Florence, 1948

Ami Pedahzur, Professor Arnold S. Chaplik Professorship in Israel and Diaspora Studies Government Jewish Studies Middle Eastern Studies Middle Eastern Studies Ctr PhD, University of Haifa, 1999

Glenn A Peers, Professor Middle Eastern Studies Ctr PhD, Johns Hopkins University, 1996

Heather G Pelletier, Lecturer French and Italian PhD, Vanderbilt University, 2004

Richard H Pells, Professor Emeritus History PhD, Harvard University, 1969

James W Pennebaker, Professor Liberal Arts Foundation Centennial Professorship Psychology PhD, University of Texas at Austin, 1977

Domino R Perez, Associate Professor English PhD, University of Nebraska - Lincoln, 1998

Francisco L Perez, Professor Emeritus Geography and the Environment PhD, University of California-Berkeley, 1985

Jorge Perez, Professor Spanish and Portuguese PhD, University of California-Santa Barbara, 2003

H W Perry Jr, Associate Professor Government PhD, University of Michigan-Ann Arbor, 1987

Michael A Pesenson, Assistant Professor Slavic and Eurasian Studies PhD, Yale University, 2001

Marina Louise Peterson, Associate Professor Anthropology PhD, University of Chicago, 2005

Petar Petrov, Assistant Professor Slavic and Eurasian Studies PhD, University of Pittsburgh, Pittsburgh Campus, 2006

Elizabeth M Pettit, Professor Barbara Pierce Bush Regents Professorship in Liberal Arts Sociology PhD, Princeton University, 1999

Stephen H Phillips, Professor Philosophy PhD, Harvard University, 1982

Tasha S Philpot, Associate Professor African and African Diaspora Studies Government PhD, University of Michigan-Ann Arbor, 2003

Herve Picherit, Assistant Professor French and Italian PhD, Stanford University, 2008

Marc Pierce, Associate Professor Germanic Studies PhD, University of Michigan-Ann Arbor, 2002

Jonathan William Pillow, Adjunct Assistant Professor Psychology PhD, New York University, 2005

John G Pipkin, Lecturer English PhD, Rice University, 1997

Russell A Poldrack, Adjunct Professor Psychology PhD, University of Illinois at Urbana-Champaign, 1995

Gabriela Polit, Associate Professor Spanish and Portuguese PhD, New York University, 2002

Mary H Polk, Lecturer Geography and the Environment PhD, University of Texas at Austin, 2016

Lito Elio Porto, Senior Lecturer Spanish and Portuguese PhD, University of Texas at Austin, 2000

Pablo Postigo Olsson, Lecturer Spanish and Portuguese MA, University of Barcelona, 2009

Joseph E Potter, Professor C. B. Smith, Sr. Centennial Chair in United States-Mexico Relations #4 Sociology PhD, Princeton University, 1975

Rose M Potter, Clinical Assistant Professor MA, University of Northern Iowa, 1984

Lucas A Powe Jr, Professor Anne Green Regents Chair Government JD, University of Washington - Seattle, 1968

Hunter Powell, Lecturer History PhD, University of Cambridge, 2011

Daniel A Powers, Professor

Sociology PhD, University of Wisconsin-Madison, 1991

Mark B Powers, Research Associate Professor Psychology PhD, University of Texas at Austin, 2006

Aaron T Pratt, Lecturer English PhD, Yale University, 2016

Alison R Preston, Associate Professor Psychology PhD, Stanford University, 2004

David F Prindle, Professor Government PhD, Massachusetts Institute of Technology, 1977

Ian N Proops, Professor Philosophy PhD, Harvard University, 1998

Jacob C Ptacek, Lecturer Rhetoric and Writing PhD, University of Texas at Austin, 2015

Tetyana Pudrovska, Associate Professor Sociology PhD, University of Wisconsin-Madison, 2007

Thomas W Pullum, Professor Emeritus Sociology PhD, University of Chicago, 1971

David G Quinto-Pozos, Associate Professor Linguistics PhD, University of Texas at Austin, 2002

Megan Margaret Raby, Assistant Professor History PhD, University of Wisconsin-Madison, 2012

Sankaran Radhakrishnan, Senior Lecturer Asian Studies Asian Studies PhD, Annamalai University, 1985

Guy P Raffa, Associate Professor French and Italian PhD, Indiana University at Bloomington, 1991

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Dalpat Rajpurohit, Assistant Professor Asian Studies MPhil, Jawaharlal Nehru University, 2007

Kelly Raley, Professor Christie and Stanley E. Adams, Jr. Centennial Professorship in Liberal Arts Sociology PhD, University of Wisconsin-Madison, 1994

Manuel Ramirez III, Professor Psychology PhD, University of Texas at Austin, 1963

Silvia D Ramirez, Lecturer Spanish and Portuguese Licenciado, Nat University of Mexico, 1974

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Gilbert C Rappaport, Professor Emeritus Slavic and Eurasian Studies PhD, University of California-Los Angeles, 1979

Wayne A Rebhorn Jr, Professor Celanese Centennial Professorship English French and Italian PhD, Yale University, 1968

Richard J Reddick, Associate Professor African and African Diaspora Studies African and African Diaspora Studies EdD, Harvard University, 2007

Robert L Reece, Assistant Professor Sociology PhD, Duke University, 2017

Cory A Reed, Associate Professor Spanish and Portuguese PhD, Princeton University, 1989

Denne N Reed, Associate Professor Anthropology PhD, State University of New York at Stony Brook, 2003

Naomi B Reed, Lecturer African and African Diaspora Studies PhD, University of Texas at Austin, 2013

Lauretta Reeves, Senior Lecturer Psychology PhD, Temple University, 1993

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Mark Regnerus, Associate Professor Sociology PhD, University of North Carolina at Chapel Hill, 2000

Stanley J Reiser, Adjunct Professor PhD, Harvard University, 1970

Roger Deveer Renwick, Professor Emeritus English PhD, University of Pennsylvania, 1974

Ann M Repp, Senior Lecturer Psychology PhD, University of Texas at Austin, 1994 Penne L Restad, Distinguished Senior Lecturer History PhD, University of Texas at Austin, 1993

Ann M Reynolds, Associate Professor Women's and Gender Studies PhD, City University of New York Graduate Center, 1993

Edward J Rhoads, Professor Emeritus History PhD, Harvard University, 1970

Heather R Rice, Lecturer Slavic and Eurasian Studies PhD, Indiana University at Bloomington, 2015

Matt T Richardson, Associate Professor African and African Diaspora Studies African and African Diaspora Studies English Women's and Gender Studies PhD, University of California-Berkeley, 2005

Elizabeth Richmond-Garza, Associate Professor English PhD, Columbia University in the City of New York, 1992

Catherine Riegle-Crumb, Associate Professor Sociology PhD, University of Chicago, 2000

Michael Rivera, Assistant Professor Government PhD, University of California-San Diego, 2014

Brian E Roberts, Professor Economics Government PhD, Washington University in St Louis, 1986

Bryan R Roberts, Professor Emeritus Sociology PhD, University of Chicago, 1964

Jason E Roberts, Lecturer Religious Studies Slavic and Eurasian Studies PhD, University of Texas at Austin, 2017

Patricia Roberts-Miller, Professor English Rhetoric and Writing PhD, University of California-Berkeley, 1985

Victoria E Rodriguez, Professor Government PhD, University of California-Berkeley, 1987

Enrique R Rodriguez, Associate Professor Anthropology PhD, University of Chicago, 2002

Nestor P Rodriguez, Professor Sociology PhD, University of Texas at Austin, 1984

Mathilde C Rogez, Visiting Associate Professor English PhD, Universite de Paris X, Nanterre, 2008

Nicholas K Roland, Lecturer History PhD, University of Texas at Austin, 2017

Sergio Romero, Associate Professor Latin American Studies Spanish and Portuguese PhD, University of Pennsylvania, 2006

Sonia Roncador, Associate Professor Spanish and Portuguese PhD, New York University, 1999

Mary Rose, Associate Professor Sociology PhD, Duke University, 1998

Arlene Rosen, Professor Anthropology PhD, University of Chicago, 1985

Catherine E Ross, Professor Emeritus Sociology PhD, Yale University, 1980

Charles R Rossman, Professor Emeritus English PhD, University of Southern California, 1968

Michele A Rountree, Associate Professor Women's and Gender Studies PhD, Arizona State University Main, 1992

Loriene Roy, Professor Women's and Gender Studies PhD, University of Illinois at Urbana-Champaign, 1987

Sharmila Rudrappa, Professor Sociology Women's and Gender Studies PhD, University of Wisconsin-Madison, 2001

Antonio Ruiz-Camacho, Visiting Associate Professor English MFA, University of Texas at Austin, 2012

John P Rumrich, Professor Arthur J. Thaman and Wilhelmina Dore' Thaman Endowed Professorship in English #1 English PhD, University of Virginia, 1981

Stephen Thomas Russell, Professor Priscilla Pond Flawn Regents Professorship in Child Development Sociology PhD, Duke University, 1994

Cinzia Russi, Associate Professor French and Italian PhD, University of Washington - Seattle, 2003

John J Ruszkiewicz, Professor Emeritus Rhetoric and Writing PhD, Ohio State U Main Campus, 1977

John N Rutledge, Adjunct Professor Psychology MD, University of Oklahoma Health Sciences Center, 1980

Donnie Sackey, Assistant Professor Rhetoric and Writing PhD, Michigan State University, East Lansing, 2013

Michael A Sadler, Senior Lecturer Economics PhD, University of Texas at Austin, 1997

Alan M Sager, Lecturer Government PhD, Northwestern University, 1971

Aysegul Sahin, Professor Economics PhD, University of Rochester, 2002

Richard M Sainsbury, Professor Philosophy DPhil, University of Oxford, 1970

Tomoko Sakuma, Lecturer Asian Studies PhD, University of Texas at Austin, 2011

Cesar A Salgado, Associate Professor Spanish and Portuguese PhD, Yale University, 1993

Aaron G Sandel, Assistant Professor Anthropology PhD, University of Michigan-Ann Arbor, 2017

Sahotra Sarkar, Professor Philosophy PhD, University of Chicago, 1989

Laura E Saurborn, Lecturer English MFA, Warren Wilson College, 2008

Elizabeth D Scala, Professor English PhD, Harvard University, 1994

Timothy J Schallert, Professor Emeritus Psychology PhD, Arizona State University Main, 1976

William J Scheick, Professor Emeritus English PhD, University of Illinois at Urbana-Champaign, 1969

Beatriz E Schleppe, Lecturer French and Italian PhD, University of Texas at Austin, 2003

Karl M Schmitt, Professor Emeritus Government PhD, University of Pennsylvania, 1954

Helen Schneider, Lecturer Economics PhD, Cornell University, 2002

David M Schnyer, Professor Psychology PhD, University of Arizona, 1998 Jonathan Wyn Schofer, Associate Professor Religious Studies PhD, University of Chicago, 2000

Lauren Schudde, Assistant Professor Sociology PhD, University of Wisconsin-Madison, 2013

Megan Seaholm, Senior Lecturer History PhD, Rice University, 1988

Chad Eugene Seales, Associate Professor Religious Studies PhD, University of North Carolina at Chapel Hill, 2007

Sonia T Seeman, Associate Professor Middle Eastern Studies Middle Eastern Studies Ctr PhD, University of California-Los Angeles, 2002

Eyal Seidemann, Professor Psychology PhD, Stanford University, 1998

Henry A Selby, Professor Emeritus Anthropology PhD, Stanford University, 1966

Martha A Selby, Professor Ralph B. Thomas Regents Professorship in Asian Studies Asian Studies PhD, University of Chicago, 1994

Albert D Sellstrom, Professor Emeritus French and Italian PhD, Princeton University, 1956

Suzanne K Seriff, Senior Lecturer Anthropology PhD, University of Texas at Austin, 1989

Sandro Sessarego, Associate Professor Spanish and Portuguese PhD, Ohio State U Main Campus, 2010

Thomas K Seung, Professor Emeritus Philosophy PhD, Yale University, 1965

Yekaterina K Severts, Lecturer Slavic and Eurasian Studies PhD, University of Texas at Austin, 2015

Gautami Hiru Shah, Senior Lecturer Asian Studies MS, Purdue University North Central Campus, 1988

Anousha Shahsavari, Lecturer Middle Eastern Studies MA, Shiraz University, 2005

Ahmed Shamim, Lecturer Asian Studies Asian Studies MA, City University of New York Graduate Center, 2011

Dima Y Shamoun, Lecturer Economics

# PhD, George Mason University, 2013

Jishnu Shankar, Senior Lecturer Asian Studies PhD, Syracuse University Main Campus, 2011

Harel Shapira, Assistant Professor Sociology PhD, Columbia University in the City of New York, 2010

Liza J Shapiro, Professor Anthropology PhD, State University of New York at Stony Brook, 1991

Daron R Shaw, Professor Frank C. Erwin, Jr. Centennial Chair in State Government Government PhD, University of California-Los Angeles, 1994

Dina M Sherzer, Professor Emeritus French and Italian PhD, University of Pennsylvania, 1970

Joel F Sherzer, Professor Emeritus Anthropology PhD, University of Pennsylvania, 1968

Kenneth I Shine, Adjunct Professor MD, Harvard University, 1961

Snehal A Shingavi, Associate Professor English PhD, University of California-Berkeley, 2008

Faegheh S Shirazi, Professor Middle Eastern Studies Middle Eastern Studies Ctr Women's and Gender Studies PhD, Ohio State U Main Campus, 1985

Jason D Shumake, Research Assistant Professor Psychology PhD, University of Texas at Austin, 2004

Elizabeth L Shumpert, Associate Professor-ROTC Military Science MS, University of Texas at Austin, 2015

Nicolas Shumway, Professor Emeritus Spanish and Portuguese PhD, University of California-Los Angeles, 1976

Clemens Sialm, Professor Texas Commerce Bancshares, Inc. Centennial Professorship in Commercial Banking Economics PhD, Stanford University, 2001

David S Sibley, Professor John T. Stuart III Centennial Professorship in Economics PhD, Yale University, 1973

Charles M Silver, Professor Roy W. and Eugenia C. McDonald Endowed Chair of Civil Procedure Government JD, Yale University, 1987

Balbir K Singh, Postdoctoral Fellow

Women's and Gender Studies PhD, University of Washington - Seattle, 2016

Gideon A Sjoberg, Professor Emeritus Sociology PhD, Washington State University, 1949

Allison Skerrett, Associate Professor African and African Diaspora Studies African and African Diaspora Studies PhD, Boston College, 2007

Melissa E Skidmore, Lecturer French and Italian PhD, University of Texas at Austin, 2005

Vasiliki Skreta, Professor Economics PhD, University of Pittsburgh, Pittsburgh Campus, 2001

Daniel T Slesnick, Professor Economics PhD, Harvard University, 1982

Bjorn I Sletto, Associate Professor Geography and the Environment PhD, Cornell University, 2006

Casey Lauren Sloan, Lecturer English PhD, University of Texas at Austin, 2017

James Slotta, Assistant Professor Anthropology PhD, University of Chicago, 2012

Rajka Smiljanic, Associate Professor Linguistics PhD, University of Illinois at Urbana-Champaign, 2002

Cherise Smith, Associate Professor African and African Diaspora Studies African and African Diaspora Studies PhD, Stanford University, 2004

Christen Smith, Associate Professor African and African Diaspora Studies African and African Diaspora Studies Anthropology Women's and Gender Studies PhD, Stanford University, 2007

Daniel Smith, Lecturer Rhetoric and Writing PhD, Pennsylvania State University Park, 2004

Geoffrey Smith, Assistant Professor Religious Studies PhD, Princeton University, 2013

Mark C Smith, Associate Professor American Studies PhD, University of Texas at Austin, 1980

Nicole Smith, Lecturer Philosophy PhD, Bowling Green State University, 2013

Tara A Smith, Professor

Philosophy PhD, Johns Hopkins University, 1990

Jasper A Smits, Professor Psychology PhD, University of Texas at Austin, 2004

Rupert Snell, Professor Emeritus Asian Studies PhD, University of London, 1984

Laura Snyder, Lecturer Germanic Studies MA, University of Kentucky, 2012

Carlos A Sole, Professor Emeritus Spanish and Portuguese PhD, Georgetown University, 1966

Yolanda Sole, Professor Emeritus Spanish and Portuguese PhD, Georgetown University, 1966

Zeynep Somer-Topcu, Assistant Professor Government PhD, University of California-Davis, 2009

Kerstin E Somerholter, Senior Lecturer Germanic Studies PhD, University of Texas at Austin, 1999

Patricia A Somers, Associate Professor Women's and Gender Studies PhD, University of New Orleans, 1992

Susan B Somers-Willett, Lecturer Women's and Gender Studies PhD, University of Texas at Austin, 2003

Stephen M Sonnenberg, Adjunct Professor MD, Yeshiva University, 1965

David Sosa, Professor Louann and Larry Temple Centennial Professorship in the Humanities Philosophy PhD, Princeton University, 1996

Bartholomew H Sparrow, Professor Government PhD, University of Chicago, 1991

Dean E Spears, Assistant Professor Economics PhD, Princeton University, 2013

Lawrence W Speck, Professor The W. L. Moody, Jr. Centennial Professorship in Architecture Geography and the Environment MArch, Massachusetts Institute of Technology, 1972

Denise A Spellberg, Professor History Middle Eastern Studies Middle Eastern Studies Ctr Religious Studies PhD, Columbia University in the City of New York, 1989

David B Spence, Professor Herbert D. Kelleher Centennial Professorship in Business Law Government PhD, Duke University, 1997

Clay Spinuzzi, Professor English Rhetoric and Writing PhD, Iowa State University, 1999

Dale O Stahl II, Professor Malcolm Forsman Centennial Professorship Economics PhD, University of California-Berkeley, 1981

Thomas F Staley, Professor Emeritus English PhD, University of Pittsburgh, Pittsburgh Campus, 1962

Nancy K Stalker, Associate Professor Asian Studies History Women's and Gender Studies PhD, Stanford University, 2002

Dana J Stauffer, Senior Lecturer Government PhD, University of Toronto, 2005

Devin A Stauffer, Associate Professor Government PhD, Boston College, 1998

Paul J Stekler, Professor Wofford Denius Chair in Entertainment Studies Government PhD, Harvard University, 1983

Kathleen C Stewart, Professor Anthropology PhD, University of Michigan-Ann Arbor, 1987

Eric M Stice, Adjunct Associate Professor Psychology PhD, Arizona State University Main, 1996

Maxwell B Stinchcombe, Professor E. C. McCarty Centennial Professorship Economics PhD, University of California-Berkeley, 1986

Michael B Stoff, Associate Professor History PhD, Yale University, 1977

William M Stott, Professor Emeritus American Studies English PhD, Yale University, 1972

Stephen M Strakowski, Professor Psychology MD, Vanderbilt University, 1988

Sandra B Straubhaar, Distinguished Senior Lecturer Germanic Studies PhD, Stanford University, 1982

Andrew D Straw, Lecturer Russian, East European, and Eurasian Studies

# PhD, University of Texas at Austin, 2017

Galen Strawson, Professor Chair in Philosophy Philosophy DPhil, University of Oxford, 1983

Jurgen K Streeck, Professor Anthropology Germanic Studies PhD, Free University of Berlin, 1981

Pauline T Strong, Professor Anthropology Women's and Gender Studies PhD, University of Chicago, 1992

Scott R Stroud, Associate Professor Rhetoric and Writing PhD, Temple University, 2006

David S Stuart, Professor Linda and David Schele Chair in the Art and Writing of Mesoamerica Anthropology PhD, Vanderbilt University, 1995

Circe D Sturm, Associate Professor Anthropology PhD, University of California-Davis, 1997

Naoko Suito, Senior Lecturer Asian Studies PhD, University of Texas at Austin, 1991

Teresa A Sullivan, Professor Emeritus Sociology PhD, University of Chicago, 1975

Jeremi Suri, Professor Mack Brown Distinguished Chair for Leadership in Global Affairs History Middle Eastern Studies Ctr PhD, Yale University, 2001

Harvey M Sussman, Professor R. P. Doherty, Sr. Centennial Professorship in Communication Linguistics PhD, University of Wisconsin-Madison, 1970

Madelin Sutherland-Meier, Associate Professor Spanish and Portuguese PhD, University of California-San Diego, 1983

Janet K Swaffar, Professor Emeritus Germanic Studies PhD, University of Wisconsin-Madison, 1965

William B Swann Jr, Professor William Howard Beasley III Professorship in the Graduate School of Business Psychology PhD, University of Minnesota-Twin Cities, 1978

William S Swearingen, Lecturer Sociology PhD, University of Texas at Austin, 1997

Ori Swed, Lecturer Sociology PhD, University of Texas at Austin, 2016

Margaret A Syverson, Associate Professor Emeritus Rhetoric and Writing PhD, University of California-San Diego, 1994

Cynthia M Talbot, Professor Asian Studies History PhD, University of Wisconsin-Madison, 1988

Midori Tanaka, Lecturer Asian Studies MA, University of Oregon, 1996

Eric Tang, Associate Professor African and African Diaspora Studies African and African Diaspora Studies Sociology PhD, New York University, 2006

Brian T Teets, Professor-ROTC Naval Science MS, Naval War College, 2006

Michael J Telch, Professor Psychology PhD, Stanford University, 1982

Wen-Hua Teng, Senior Lecturer Asian Studies PhD, University of Texas at Austin, 1990

Viorica Alexa Teodorescu, Lecturer Linguistics PhD, University of Texas at Austin, 2009

Sean M Theriault, Professor Government PhD, Stanford University, 2001

Delbert D Thiessen, Professor Emeritus Psychology PhD, University of California-Berkeley, 1963

Caroline Desiree Thomas, Assistant Professor Economics MSc, University College London, 2004

Henry G Thomas, Adjunct Assistant Professor MAEd, Harvard University, 1974

John S Thompson, Lecturer Economics PhD, Auburn University, 1998

Lisa B Thompson, Associate Professor African and African Diaspora Studies African and African Diaspora Studies English PhD, Stanford University, 2000

Shirley E Thompson, Associate Professor African and African Diaspora Studies African and African Diaspora Studies American Studies History Women's and Gender Studies

# PhD, Harvard University, 2001

Katharine A Tillman, Other University Affiliate Psychology PhD, University of California-San Diego, 2017

Natasha Tinsley, Associate Professor African and African Diaspora Studies African and African Diaspora Studies PhD, University of California-Berkeley, 2003

Sheridan Titman, Professor Walter W. McAllister Centennial Chair in Financial Services Economics PhD, Carnegie Mellon University, 1981

Jeffrey B Titus, Clinical Assistant Professor Psychology PhD, Ball State University, 2002

Janice S Todd, Professor Women's and Gender Studies PhD, University of Texas at Austin, 1995

Almeida J Toribio, Professor African and African Diaspora Studies African and African Diaspora Studies Spanish and Portuguese PhD, Cornell University, 1993

Rebecca M Torres, Associate Professor Geography and the Environment PhD, University of California-Davis, 2000

Robert Town, Professor James L. and Nancy Powell Centennial Professorship in American Economic Principles Economics PhD, University of Wisconsin Colleges, 1990

John W Traphagan, Professor Anthropology Religious Studies PhD, University of Pittsburgh, Pittsburgh Campus, 1997

Stephen J Trejo, Professor Economics PhD, University of Chicago, 1988

John R Trimble, Professor Emeritus English Rhetoric and Writing PhD, University of California-Berkeley, 1971

Brian M Trinque, Lecturer Economics PhD, University of Texas at Austin, 1993

Chien-Hsin Tsai, Associate Professor Asian Studies PhD, Harvard University, 2009

Elliot Max Tucker-Drob, Associate Professor Psychology PhD, University of Virginia, 2009

Jeffrey K Tulis, Associate Professor Government PhD, University of Chicago, 1982

Alan Tully, Professor Eugene C. Barker Centennial Professorship in American History History PhD, Johns Hopkins University, 1973

Ann Twinam, Professor Walter Prescott Webb Chair in History History PhD, Yale University, 1976

Robert G Twombly, Associate Professor Emeritus English PhD, Yale University, 1965

Michael Tye, Professor Dallas TACA Centennial Professorship in the Liberal Arts Philosophy PhD, New York University, 1975

Kathleen R Tyner, Associate Professor Women's and Gender Studies MA, San Francisco State University, 1986

Antonio Ugalde, Professor Emeritus Sociology PhD, Stanford University, 1969

Debra J Umberson, Professor Centennial Commission Professorship in the Liberal Arts #1 Sociology PhD, Vanderbilt University, 1985

Gary N Underwood, Associate Professor Emeritus English PhD, University of Minnesota-Twin Cities, 1970

Deborah Unferth, Associate Professor English MFA, Syracuse University Main Campus, 1998

Per K Urlaub, Adjunct Associate Professor Germanic Studies PhD, Stanford University, 2008

Luis Urrieta, Professor Suzanne B. and John L. Adams Endowed Professorship in Education Latin American Studies PhD, University of North Carolina at Chapel Hill, 2003

Alex Valadka, Adjunct Professor Psychology MD, University of Chicago, 1987

Fred Valdez Jr, Professor Anthropology PhD, Harvard University, 1987

Gladys S Valdez, Lecturer Psychology PhD, University of Texas at Austin, 2007

Suzanne V Van Der Feest, Lecturer Linguistics PhD, Radboud Universiteit Nijmegen, 2007

Patrick Van Horn, Lecturer Economics

# PhD, University of California-Irvine, 2007

Herman H Van Olphen, Professor Emeritus Asian Studies PhD, University of Texas at Austin, 1970

Vincent Vanderheijden, Lecturer Germanic Studies PhD, University of Texas at Austin, 2011

James Martin Vaughn, Assistant Professor History PhD, University of Chicago, 2008

Maurizio Viroli, Professor French and Italian Government PhD, European University Institute, 1985

Paul Von Hippel, Associate Professor Sociology PhD, Ohio State U Main Campus, 2010

Sam C Vong, Assistant Professor History PhD, Yale University, 2013

Peter J Voss, Lecturer Rhetoric and Writing PhD, University of Texas at Austin, 2016

Maria D Wade, Associate Professor Anthropology PhD, University of Texas at Austin, 1998

Warwick P Wadlington, Professor Emeritus English PhD, Tulane University, 1967

Robert H Wagner, Professor Emeritus Government PhD, Harvard University, 1966

Louis A Waldman, Associate Professor French and Italian PhD, New York University, 1999

Jayme M Walenta, Lecturer Geography and the Environment PhD, University of British Columbia, 2010

Edward L Walker, Senior Research Fellow MBA, Harvard University, 1967

Jeffrey Walker, Professor English Rhetoric and Writing PhD, University of California-Berkeley, 1985

Juliet E K Walker, Professor African and African Diaspora Studies African and African Diaspora Studies History PhD, University of Chicago, 1976

Robert E Wall, Professor Emeritus Linguistics PhD, Harvard University, 1961

Di Wang, Lecturer

Government PhD, Texas A & M University, 2015

Vincent Y Wang, Adjunct Professor Psychology PhD, Baylor College of Medicine, 2003

Peter Ward, Professor C. B. Smith, Sr. Centennial Chair in United States-Mexico Relations #1 Geography and the Environment PhD, University of Liverpool, 1976

Eric M Warr, Professor Emeritus Sociology PhD, University of Arizona, 1979

Samuel C Watkins, Professor African and African Diaspora Studies PhD, University of Michigan-Ann Arbor, 1994

Anthony K Webster, Professor Anthropology Linguistics PhD, University of Texas at Austin, 2004

Stephen M Wechsler, Professor Linguistics PhD, Stanford University, 1991

Alexander A Weinreb, Associate Professor Sociology PhD, University of Pennsylvania, 2000

Amelia Gabrielle Weinreb, Lecturer Jewish Studies PhD, University of Pennsylvania, 2007

John M Weinstock, Professor Emeritus Germanic Studies PhD, University of Wisconsin-Madison, 1967

Abigail Weitzman, Assistant Professor Sociology PhD, New York University, 2015

Rachel Wellhausen, Assistant Professor Government PhD, Massachusetts Institute of Technology, 2012

Bruce Wells, Associate Professor Middle Eastern Studies PhD, Johns Hopkins University, 2003

Timothy Daniel Werner, Associate Professor Government PhD, University of Wisconsin-Madison, 2009

Jo Lynn Westbrook, Associate Professor Women's and Gender Studies PhD, University of Michigan-Ann Arbor, 1995

Alexandra K Wettlaufer, Professor Stuart W. Stedman Director's Chair in Plan II, Hayden W. Head Regents Chair in the Plan II Honors Program French and Italian PhD, Columbia University in the City of New York, 1993

Walter D Wetzels, Professor Emeritus Germanic Studies

## PhD, Princeton University, 1968

David A Wevill, Professor Emeritus English MA, University of Cambridge, 1957

Kurt G Weyland, Professor Mike Hogg Professorship in Liberal Arts Government PhD, Stanford University, 1991

Frank F Whigham Jr, Professor Emeritus English PhD, University of California-San Diego, 1975

Andrew B Whinston, Professor Hugh Roy Cullen Centennial Chair in Business Administration Economics PhD, Carnegie Mellon University, 1962

Deborah E White, Senior Lecturer Linguistics MA, Gallaudet University, 1993

L M White, Professor The Ronald Nelson Smith Chair in Classics & Christian Origins Religious Studies PhD, Yale University, 1982

Stephen A White, Professor Philosophy PhD, University of California-Berkeley, 1987

Sarah Jey Whitehead, Lecturer Spanish and Portuguese PhD, University of Texas at Austin, 2014

Catherine Whiting, Clinical Assistant Professor Psychology PhD, The University of Memphis, 2001

Henry Alexander Wiencek, Postdoctoral Fellow History PhD, University of Texas at Austin, 2017

Walter Wilczynski, Adjunct Professor Psychology PhD, University of Michigan-Ann Arbor, 1978

Evgenia Mikhaylova Wilkins, Lecturer Slavic and Eurasian Studies PhD, University of Texas at Austin, 2017

Karin G Wilkins, Professor John P. McGovern Regents Professorship in Health and Medical Science Communication Middle Eastern Studies Middle Eastern Studies Ctr Women's and Gender Studies PhD, University of Pennsylvania, 1991

Lynn R Wilkinson, Associate Professor Germanic Studies Women's and Gender Studies PhD, University of California-Berkeley, 1983

Jennifer M Wilks, Associate Professor African and African Diaspora Studies African and African Diaspora Studies English PhD, Cornell University, 2003

Christine L Williams, Professor Elsie and Stanley E. (Skinny) Adams, Sr. Centennial Professorship in Liberal Arts Sociology Women's and Gender Studies PhD, University of California-Berkeley, 1986

Robert H Wilson, Professor Mike Hogg Professorship of Urban Policy Geography and the Environment PhD, University of Pennsylvania, 1979

Samuel M Wilson, Professor Emeritus Anthropology PhD, University of Chicago, 1986

James I Wimsatt, Professor Emeritus English PhD, Duke University, 1964

Michael B Winship, Professor Iris Howard Regents Professorship in English Literature #2 English DPhil, University of Oxford, 1990

William J Winslade, Adjunct Professor Philosophy PhD, Northwestern University, 1967

Thomas E Wiseman, Associate Professor Economics PhD, Northwestern University, 2001

Christopher Wlezien, Professor Mike Hogg Professorship in Government Government PhD, University of Iowa, 1989

Hannah C Wojciehowski, Professor Arthur J. Thaman and Wilhelmina Dore' Thaman Endowed Professorship in English #2 English PhD, Yale University, 1984

Michael Scott Wolford, Associate Professor Government PhD, Emory University, 2008

Seth L Wolitz, Professor Emeritus French and Italian Slavic and Eurasian Studies PhD, Yale University, 1965

Helena Woodard, Associate Professor African and African Diaspora Studies African and African Diaspora Studies English PhD, University of North Carolina at Chapel Hill, 1991

Anthony C Woodbury, Professor Anthropology Linguistics PhD, University of California-Berkeley, 1981

Paul B Woodruff, Professor Darrell K Royal Regents Professorship in Ethics and American Society Philosophy PhD, Princeton University, 1973

Marjorie C Woods, Professor Jane and Roland Blumberg Centennial Professorship in English English History PhD, University of Toronto, 1977

Jacqueline D Woolley, Professor Psychology PhD, University of Michigan-Ann Arbor, 1990

Fu Lye Woon, Clinical Assistant Professor Psychology PhD, Brigham Young University, 2010

Harold A Wylie Jr, Associate Professor Emeritus African and African Diaspora Studies French and Italian PhD, Stanford University, 1965

Charters S Wynn, Associate Professor History Slavic and Eurasian Studies PhD, Stanford University, 1987

Michael Francis Wynne Jr, Lecturer Linguistics MA, Gallaudet University, 2005

Haiqing Xu, Assistant Professor Economics PhD, Pennsylvania State University Park, 2011

Veronica Yan, Assistant Professor Psychology PhD, University of California-Los Angeles, 2014

Tal Yarkoni, Research Assistant Professor Psychology PhD, Washington University in St Louis, 2009

David Scott Yeager, Associate Professor Psychology PhD, Stanford University, 2011

Dean H Young, Professor William S. Livingston Endowed Chair in Writing English MFA, Indiana University at Bloomington, 1984

Hershini Young, Professor African and African Diaspora Studies PhD, University of California-Berkeley, 1999

Kenneth R Young, Professor Geography and the Environment Latin American Studies PhD, University of Colorado at Boulder, 1990

Michael P Young, Associate Professor Sociology PhD, New York University, 2000

Sandra E Black, Professor Audre and Bernard Rapoport Centennial Chair in Economics Economics PhD, Harvard University, 1997

Aaron S Zacks, Lecturer Rhetoric and Writing PhD, University of Texas at Austin, 2012

Emilio Zamora, Professor History PhD, University of Texas at Austin, 1983

Jay W Zarnikau Economics PhD, University of Texas at Austin, 1990

Maria Del Pilar Zazueta, Lecturer Latin American Studies PhD, Columbia University in the City of New York, 2011

Mark A Zentner, Clinical Assistant Professor Psychology PhD, University of Texas at Austin, 1999

Anastasia Zervou, Lecturer Economics PhD, Washington University in St Louis, 2009

Abraham Zilkha, Associate Professor Emeritus Middle Eastern Studies PhD, University of Texas at Austin, 1970

Christine Zumello, Visiting Associate Professor English PhD, Universite de Paris III, Sorbonne Nouvelle, 1997

# College of Natural Sciences Faculty

The following faculty list represents those appointed in the 2018 spring semester.

Scott J Aaronson, Professor Computer Science PhD, University of California-Berkeley, 2004

Sarah A Abraham, Lecturer Computer Science Computer Science PhD, University of Texas at Austin, 2015

Elia S Abreu Olvera, Specialist Mathematics BS, University of Texas at Austin, 2015

Santos A Acosta, Specialist Biology Instruction Office BS, University of Texas at Austin, 2017

Meena D Adhikary, Specialist Human Ecology MEd, University of Texas at Austin, 1990

Seema Agarwala, Associate Professor Molecular Biosciences PhD, State University of New York at Stony Brook, 1990

Lucas D Akin, Specialist Chemistry BS, University of Texas at Austin, 2016 Teri J Albrecht, Lecturer PhD, University of Texas at Austin, 2007

Richard W Aldrich, Professor Karl Folkers Chair in Interdisciplinary Biomedical Research II Neuroscience PhD, Stanford University, 1980

Alejandro Aleman Jr, Specialist Biology Instruction Office MS, University of Texas at Austin, 2017

Daniel J Allcock, Professor Mathematics PhD, University of California-Berkeley, 1996

Kelli R Allen, Clinical Assistant Professor MS, Pittsburg State University, 1998

Albert T Almanza, Specialist Chemistry BS, University of Texas at Austin, 2014

Lorenzo Alvisi, Professor Emeritus Computer Science PhD, Cornell University, 1996

Natalie Y Ammon, Lecturer Human Ecology PhD, University of Texas at Austin, 2011

Timothy R Andeen Jr, Assistant Professor Physics PhD, Northwestern University, 2008

Edward R Anderson, Associate Professor Human Ecology PhD, University of Virginia, 1989

Morgan James Anderson, Specialist Chemistry PhD, University of Texas at Austin, 2017

Kathleen Anding McInnis, Lecturer Human Ecology PhD, University of Texas at Austin, 2016

Eric V Anslyn, Professor Welch Regents Chair in Chemistry Chemistry PhD, California Institute of Technology, 1988

Dean R Appling, Professor Lester J. Reed Professorship in Biochemistry Molecular Biosciences PhD, Vanderbilt University, 1981

Jonathan F Arambula, Lecturer Chemistry PhD, University of Illinois at Urbana-Champaign, 2008

Todd J Arbogast, Professor W. A. "Tex" Moncrief, Jr. Simulation-Based Engineering and Sciences Professorship I Mathematics PhD, University of Chicago, 1987

Jane Arledge, Senior Lecturer Mathematics PhD, University of Colorado at Boulder, 1995

Taft E Armandroff, Professor Frank and Susan Bash Endowed Chair for the Director of McDonald Observatory Astronomy PhD, Yale University, 1988

Connie R Arnold, Professor Emeritus Marine Science PhD, Texas A & M University, 1968

Karen J Artzt, Professor Emeritus Molecular Biosciences PhD, Weill Medical College of Cornell University, 1972

Nigel S Atkinson, Professor Neuroscience PhD, Pennsylvania State University Main Campus, 1986

Jennifer K Mann Austin, Lecturer Mathematics PhD, Florida State University, 2007

Ivo M Babuska, Professor Robert B. Trull Chair in Engineering Mathematics PhD, Academy of Sciences, 1955

Francois Baccelli, Professor Simons Chair in Mathematics and Electrical and Computer Engineering Mathematics These d'Etat, Universite de Paris XI, Paris-Sud, 1983

Joshua Dana Baer, Adjunct Assistant Professor Computer Science BS, Carnegie Mellon University, 1999

Carlos R Baiz, Assistant Professor Chemistry PhD, University of Michigan-Ann Arbor, 2011

Chandrajit L Bajaj, Professor CAM Chair in Visualization Computer Science PhD, Cornell University, 1984

Brett J Baker, Assistant Professor Marine Science Marine Science PhD, University of Michigan-Ann Arbor, 2014

Dana H Ballard, Professor Computer Science PhD, University of California-Irvine, 1974

Zuzana Baranova, Lecturer Chemistry PhD, Texas A & M University, 2017

Allen J Bard, Professor Norman Hackerman - Welch Regents Chair in Chemistry Chemistry PhD, Harvard University, 1958

Kaylyn R Barrett, Specialist Biology Instruction Office BS, University of Texas at Austin, 2017 Jeffrey E Barrick, Assistant Professor Molecular Biosciences PhD, Yale University, 2006

Suzanne S Barth, Adjunct Associate Professor Biology Instruction Office PhD, University of Texas at Austin, 1983

Frank N Bash, Professor Emeritus Astronomy PhD, University of Virginia (Old Code), 1967

Don S Batory, Professor David Bruton, Jr. Centennial Professorship in Computer Sciences #1 Computer Science PhD, University of Toronto, 1981

John C Batterton, Lecturer Biology Instruction Office PhD, University of Texas at Austin, 1970

Nathan L Bauld, Professor Emeritus Chemistry PhD, University of Illinois at Urbana-Champaign, 1959

Vanessa M Bazan, Specialist Biology Instruction Office BS, University of Texas at Austin, 2017

Angela Chappell Beasley, Lecturer Computer Science MS, George Washington University, 2007

Cam Beasley, Lecturer Computer Science BSChE, University of Texas at Austin, 2001

William Beckner, Professor Paul V. Montgomery Centennial Memorial Professorship in Mathematics Mathematics PhD, Princeton University, 1975

Ockhee Bego, Lecturer Human Ecology MFA, Academy of Art University, 2010

David D Ben-Zvi, Professor Mathematics PhD, Harvard University, 1999

Roger D Bengtson, Professor Emeritus Physics PhD, University of Maryland College Park, 1968

Aprile D Benner, Associate Professor Human Ecology PhD, University of California-Los Angeles, 2007

Philip A Benson, Specialist Biology Instruction Office Chemistry BS, University of Texas at Austin, 2017

Sterling K Berberian, Professor Emeritus Mathematics PhD, University of Chicago, 1955

Herbert L Berk, Professor Emeritus Physics PhD, Princeton University, 1964

Katherine Alexis Biberdorf, Lecturer Chemistry PhD, University of Texas at Austin, 2014

Klaus R Bichteler, Professor Emeritus Mathematics PhD, University of Hamburg, 1965

George Biros, Professor W. A. "Tex" Moncrief, Jr. Endowment in Simulation-Based Engineering and Sciences - Endowed Chair No. 2 Computer Science PhD, Carnegie Mellon University, 2000

George D Bittner, Professor Neuroscience PhD, Stanford University, 1967

Bryan Andrew Black, Associate Professor Marine Science Marine Science PhD, Pennsylvania State University Park, 2003

Garrett Blake, Research Engineering/ Scientist Associate II Chemistry PhD, University of Texas at Austin, 2016

Kirk D Blazek, Lecturer Mathematics PhD, University of Washington - Seattle, 2006

Andrew Justin Blumberg, Associate Professor Mathematics PhD, University of Chicago, 2005

Arno R Bohm, Professor Emeritus Physics PhD, Philipps-University of Marburg, 1966

Daniel I Bolnick, Professor Biology Instruction Office PhD, University of California-Davis, 2003

Henry R Bose, Professor Emeritus Molecular Biosciences PhD, Indiana University at Bloomington, 1967

Lisa D Boucher, Lecturer Biology Instruction Office PhD, Ohio State U Main Campus, 1995

Jason R Bourgeois, Associate Academic Advisor MEd, University of Texas at Austin, 2012

Lewis P Bowen, Professor Mathematics PhD, University of Texas at Austin, 2002

Brendan P Bowler, Assistant Professor Astronomy PhD, University of Hawaii at Manoa, 2013

Robert S Boyer, Professor Emeritus Computer Science PhD, University of Texas at Austin, 1971

Michael Boylan-Kolchin, Assistant Professor Astronomy

### PhD, University of California-Berkeley, 2006

Jerry J Brand, Professor Emeritus Molecular Biosciences PhD, Purdue University Main Campus, 1971

Molly S Bray, Professor Susan T. Jastrow Human Ecology Chair for Excellence in Nutritional Sciences Human Ecology PhD, University of Texas Health Science Center at Houston, 1998

Michel Breger, Adjunct Professor Astronomy PhD, University of California-Berkeley, 1969

Boris Breizman, Research Professor (Affiliated) Physics PhD, Budker Institute of Nuclear Physics, 1978

Margaret E Briley, Professor Human Ecology PhD, Texas Tech University, 1973

Patrick L Brockett, Professor Gus Wortham Memorial Chair in Risk Management and Insurance Mathematics PhD, University of California-Irvine, 1975

Jennifer S Brodbelt, Professor Norman Hackerman Chair in Chemistry Chemistry PhD, Purdue University Main Campus, 1988

Volker Bromm, Professor Astronomy PhD, Yale University, 2000

Franklin H Bronson, Professor Emeritus Biology Instruction Office PhD, Pennsylvania State University Main Campus, 1961

R Malcolm Brown Jr, Professor Emeritus Molecular Biosciences PhD, University of Texas at Austin, 1964

Karen S Browning, Professor Molecular Biosciences PhD, University of Illinois at Urbana-Champaign, 1980

Delia M Brownson, Specialist Human Ecology PhD, University of Texas at Austin, 1996

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Peter Burton, Instructor Mathematics PhD, California Institute of Technology, 2017

Edward J Buskey, Professor Marine Science Marine Science PhD, University of Rhode Island, 1983

Ruth E Buskirk, Distinguished Senior Lecturer Biology Instruction Office PhD, University of California-Davis, 1972

Elena Caceres, Associate Professor Physics PhD, University of Texas at Austin, 1996

Luis A Caffarelli, Professor Sid W. Richardson Foundation Regents Chair in Mathematics #1 Mathematics PhD, University of Buenos Aires, 1972

Xiaolu Cambronne, Assistant Professor Molecular Biosciences PhD, Harvard University, 2009

Alan Campion, Professor Dow Chemical Company Endowed Professorship in Chemistry Chemistry PhD, University of California-Los Angeles, 1977

Phillip E Cannata, Adjunct Professor Computer Science PhD, University of Notre Dame, 1980

David Cannatella, Professor Biology Instruction Office PhD, University of Kansas Main Campus, 1986

Caitlin M Casey, Assistant Professor Astronomy PhD, University of Cambridge, 2011

Gustavo E Cepparo, Lecturer Mathematics MS, Kansas State University, 1999

Clarence Shiu Man Chan, Associate Professor Molecular Biosciences PhD, Cornell University, 1985

James R Chelikowsky, Professor W. A. "Tex" Moncrief, Jr. Chair in Computational Materials Chemistry Physics PhD, University of California-Berkeley, 1975

Jonathan Yan Chen, Professor Human Ecology PhD, University of Leeds, 1995

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#### PhD, University of Texas at Austin, 2017

Thomas Chen, Associate Professor Mathematics PhD, Swiss Federal Institute of Technology, 2001

Zengjian J Chen, Professor D. J. Sibley Centennial Professorship in Plant Molecular Genetics Biology Instruction Office Molecular Biosciences PhD, Texas A & M University, 1993

Shao-Ying Cheng, Lecturer Biology Instruction Office PhD, University of Texas at Austin, 2009

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Charles B Chiu, Professor Emeritus Physics PhD, University of California-Berkeley, 1966

Grace Choy, Lecturer PhD, Carnegie Mellon University, 2003

Jessica Ciarla, Lecturer Human Ecology MA, Kent State University Main Campus, 2015

Mirela Ciperiani, Associate Professor Mathematics PhD, Princeton University, 2006

David Clark, Lecturer Mathematics PhD, McGill University, 1992

Gregory B Clark Biology Instruction Office PhD, University of Texas at Austin, 1992

Alan K Cline, Professor Emeritus Computer Science PhD, University of Michigan-Ann Arbor, 1970

William D Cochran, Research Professor (Affiliated) Astronomy PhD, Princeton University, 1976

Stephany S Coffman-Wolph, Lecturer Computer Science PhD, Western Michigan University, 2013

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William R Coker, Professor Physics PhD, University of Georgia, 1966

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William R Cook, Associate Professor Computer Science PhD, Brown University, 1989

Alan H Cowley, Professor Emeritus Chemistry PhD, University of Manchester, 1958

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Richard M Crooks, Professor The Robert A. Welch Chair in Chemistry (Materials Chemistry) Chemistry PhD, University of Texas at Austin, 1987

Milica Cudina, Clinical Assistant Professor Mathematics PhD, Carnegie Mellon University, 2006

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Kathryn Dabbs, Lecturer Mathematics PhD, University of Texas at Austin, 2017

Jeffrey E Danciger, Assistant Professor Mathematics PhD, Stanford University, 2011

James W Daniel, Professor Emeritus Mathematics PhD, Stanford University, 1965

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Bryan William Davies, Assistant Professor Molecular Biosciences PhD, Massachusetts Institute of Technology, 2008

Jaimie N Davis, Associate Professor Human Ecology PhD, University of Texas at Austin, 2004

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Theodore H Dix, Associate Professor Emeritus Human Ecology PhD, Northwestern University, 1980

John D Dollard, Professor Emeritus Mathematics PhD, Princeton University, 1963

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Paul Eastwick, Adjunct Associate Professor Human Ecology PhD, Northwestern University, 2009

David J Eaton, Professor Bess Harris Jones Centennial Professorship in Natural Resource Policy Studies Biology Instruction Office PhD, Johns Hopkins University, 1977

Johann K Eberhart, Associate Professor Molecular Biosciences PhD, University of Missouri - Columbia, 2002 Lauren Ilyse Richie Ehrlich, Associate Professor Molecular Biosciences PhD, Stanford University, 2002

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Martha B Gillham, Associate Professor Emeritus Human Ecology PhD, Iowa State University, 1975

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Austin M Gleeson, Professor Physics PhD, University of Pennsylvania, 1965

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Oscar Gonzalez, Professor Mathematics PhD, Stanford University, 1996

Cameron M Gordon, Professor Sid W. Richardson Foundation Regents Chair in Mathematics #2 Mathematics PhD, University of Cambridge, 1971

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Thomas A Griffy, Professor Emeritus Physics PhD, Rice University, 1961

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Sam Gunningham, Lecturer Mathematics PhD, Northwestern University, 2013

Robin Gutell, Professor Biology Instruction Office PhD, University of California-Santa Cruz, 1985

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Ronny Hadani, Associate Professor Mathematics PhD, Tel Aviv University, 2006

Amanda Hager, Lecturer Mathematics PhD, University of Iowa, 2010

Gary C Hamrick, Professor Mathematics PhD, University of Virginia, 1971

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Debra R Hansen, Lecturer Biology Instruction Office PhD, University of Texas at Austin, 2012

Amber Hardison, Assistant Professor Marine Science Marine Science PhD, College of William and Mary, 2010

Susan C Harkins, Lecturer EdD, University of Pittsburgh, Pittsburgh Campus, 1998

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Kristen M Harris, Professor Neuroscience PhD, Northeastern Ohio Universities College of Medicine, 1982

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Richard D Hazeltine, Professor Physics PhD, University of Michigan-Ann Arbor, 1968

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Raymond C Heitmann, Professor Mathematics PhD, University of Wisconsin-Madison, 1974

Graeme A Henkelman, Professor Chemistry PhD, University of Washington - Seattle, 2001

Thushani Herath, Lecturer Chemistry PhD, Wayne State University, 2015

Ladia Maxine Hernandez, Lecturer Human Ecology PhD, Texas Woman's University - Denton, 2009

David L Herrin, Professor Molecular Biosciences PhD, University of South Florida, 1986

Charlotte Herzele, Lecturer Human Ecology PhD, University of Texas at Austin, 1997

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Linda A Hicke, Professor Robert E. Boyer Chair in Natural Sciences Molecular Biosciences PhD, University of California-Berkeley, 1990

Gary J Hill, Research Professor (Affiliated) Astronomy PhD, University of Hawaii at Hilo, 1988

David M Hillis, Professor Alfred W. Roark Centennial Professorship in Natural Sciences Biology Instruction Office PhD, University of Kansas Main Campus, 1985

Mary C Hines, Lecturer Biology Instruction Office PhD, University of Louisville, 1989

David W Hoffman, Associate Professor Molecular Biosciences PhD, Duke University, 1986

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James A Holcombe, Professor Emeritus Chemistry PhD, University of Michigan-Ann Arbor, 1974

Anthony Joseph Hollenback, Specialist Chemistry BS, University of Texas at Austin, 2016

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Wendell Horton, Professor Emeritus Physics PhD, University of California-San Diego, 1967

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Qixing Huang, Assistant Professor Computer Science PhD, Stanford University, 2012

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Aletha C Huston, Professor Emeritus Human Ecology PhD, University of Minnesota-Twin Cities, 1965

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Alexander Huth, Assistant Professor Computer Science Neuroscience PhD, University of California-Berkeley, 2013

Amy E Imes, Lecturer Human Ecology PhD, University of Texas at Austin, 2008

Salvatore Ioverno, Lecturer Human Ecology PhD, University of Rome Tor Vergata, 2016

Gregory C Ippolito Biology Instruction Office PhD, University of Alabama at Birmingham, 2002

Philip Isett, Assistant Professor Mathematics PhD, Princeton University, 2013

Arie Israel, Assistant Professor Mathematics PhD, Princeton University, 2011

Brent L Iverson, Professor Warren J. and Viola Mae Raymer Professorship Chemistry PhD, California Institute of Technology, 1988

Vishwanath R Iyer, Professor Molecular Biosciences PhD, Harvard University, 1996

Deborah B Jacobvitz, Professor Amy Johnson McLaughlin Administrative Chair in Human Ecology, Phyllis L. Richards Endowed Professorship in Child Development Human Ecology PhD, University of Minnesota-Twin Cities, 1987

Dan Jaffe, Professor Jane and Roland Blumberg Centennial Professorship in Astronomy Astronomy PhD, Harvard University, 1981

Bob Jansen, Professor Sidney F. and Doris Blake Centennial Professorship in Systematic Botany and the Blake Collection Biology Instruction Office PhD, Ohio State U Main Campus, 1982

Makkuni Jayaram, Professor Molecular Biosciences PhD, Indian Institute of Science - Bangalore, 1977

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Arlen W Johnson, Professor Molecular Biosciences PhD, Harvard University, 1988

Kenneth Johnson, Professor Roger J. Williams Centennial Professorship in Biochemistry Molecular Biosciences PhD, University of Wisconsin-Madison, 1975

Spencer Owen Johnson, Specialist Mathematics BA, Pomona College, 2014

Travis H Johnson, Specialist Chemistry MS, University of Texas at Austin, 2007

Daniel Johnston, Professor Karl Folkers Chair in Interdisciplinary Biomedical Research Neuroscience PhD, Duke University, 1974

Marshall C Johnston, Professor Emeritus Biology Instruction Office PhD, University of Texas at Austin, 1955

Christopher A Jolly, Associate Professor Human Ecology PhD, Texas A & M University, 1996

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Richard A Jones, Professor Chemistry PhD, University of London, 1978 Thomas E Juenger, Professor Biology Instruction Office PhD, University of Chicago, 1999

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Vadim Kaplunovsky, Professor Physics PhD, Tel Aviv University, 1984

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Adrian T Keatinge-Clay, Associate Professor Molecular Biosciences PhD, University of California-San Francisco, 2004

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Sean M Keel, Professor Joe B. and Louise Cook Professorship in Mathematics Mathematics PhD, University of Chicago, 1989

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Se Yong Kim, Specialist Chemistry BS, University of Texas at Austin, 2015

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Cynthia A Labrake Biology Instruction Office Chemistry PhD, Loyola University Chicago, 1992

Lance A Labun, Lecturer Physics PhD, University of Arizona, 2011

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Keji Lai, Assistant Professor Physics PhD, Princeton University, 2006

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Alan Lambowitz, Professor Mr. and Mrs. A. Frank Smith, Jr. Regents Chair in Molecular Biology Molecular Biosciences PhD, Yale University, 1972

Karen M Landolt, Lecturer Computer Science JD, Northeastern University, 2000

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Judith H Langlois, Professor Charles and Sarah Seay Regents Professorship in Developmental Psychology Human Ecology PhD, Louisiana State University and Agricultural and Mechanical College, 1973

Laura M Lashinger, Research Scientist Human Ecology PhD, University of Texas Health Science Center at Houston, 2005

Anita G Latham, Senior Lecturer Biology Instruction Office PhD, University of Alabama at Birmingham, 1999

David A Laude, Professor Chemistry PhD, University of California-Riverside, 1984

Daniel J Leahy, Professor Benjamin Clayton Centennial Professorship in Biochemistry, The Benjamin Clayton Biochemical Institute Regents Lectureship, The Lorene Morrow Kelley Lectureship, The Lorene Morrow Kelley Lectureship in Molecular Biology Molecular Biosciences PhD, Stanford University, 1988

Matthew A Lease, Associate Professor Computer Science PhD, Brown University, 2009

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Blinda E McClelland, Lecturer Biology Instruction Office PhD, University of Texas at Austin, 1994

James W McClelland, Associate Professor Marine Science PhD, Boston University, 1998

Paul McCord, Senior Lecturer Chemistry PhD, University of Texas at Austin, 1992

William D McCormick, Professor Emeritus Physics PhD, Duke University, 1959

Duncan Edward McCoy, Instructor Mathematics PhD, University of Glasgow, 2016

Gene D McDonald, Lecturer Biology Instruction Office PhD, University of Texas at Austin, 1990

Jason McLellan, Associate Professor Molecular Biosciences PhD, Johns Hopkins University, 2009 Bailey McMeans, Adjunct Assistant Professor Marine Science PhD, University of Windsor, 2012

Kay McMurry, Lecturer Biology Instruction Office PhD, University of Texas at Austin, 1996

Monica R Meadows, Lecturer Human Ecology PhD, University of Texas at Austin, 2003

Mona Mehdy, Associate Professor Molecular Biosciences PhD, University of California-San Diego, 1984

Robert Messing, Professor Neuroscience MD, Stanford University, 1979

John C Meth, Lecturer Mathematics PhD, University of Texas at Austin, 2010

Lauren A Meyers, Professor Biology Instruction Office PhD, Stanford University, 2000

S J Mihic, Associate Professor Neuroscience PhD, University of Toronto, 1992

Risto P Miikkulainen, Professor Computer Science PhD, University of California-Los Angeles, 1990

Jesse E Miller, Lecturer Mathematics PhD, University of Illinois at Urbana-Champaign, 2011

Kyle M Miller, Associate Professor Molecular Biosciences PhD, University College London, 2004

Mary E Miller, Specialist Chemistry BS, Texas State University-San Marcos, 1989

Charles D Mills, Lecturer Mathematics PhD, University of Houston, 2017

Monica J Milonovich, Lecturer Human Ecology MS, Bowling Green State University, 1999

Milos Milosavljevic, Associate Professor Astronomy PhD, Rutgers the State University of New Jersey New Brunswick Campus, 2002

Dong-Ha Min, Lecturer Marine Science Marine Science PhD, University of California-San Diego, 1999

Zachary L Miner, Lecturer Mathematics PhD, University of Texas at Austin, 2011 Daniel P Miranker, Professor Computer Science PhD, Columbia University in the City of New York, 1987

Jayadev Misra, Professor Emeritus Computer Science PhD, Johns Hopkins University, 1973

Shyamal K Mitra, Senior Lecturer Computer Science PhD, University of Texas at Austin, 1988

Sarah Nicole Mladenka, Specialist Biology Instruction Office BS, University of Texas at Austin, 2017

Aloysius K Mok, Professor Quincy Lee Centennial Professorship in Computer Science Computer Science PhD, Massachusetts Institute of Technology, 1983

Ian J Molineux, Professor Molecular Biosciences DPhil, University of Oxford, 1969

Marie H Monfils, Associate Professor Neuroscience PhD, University of Lethbridge, 2005

Stephen A Monti, Professor Emeritus Chemistry PhD, Massachusetts Institute of Technology, 1964

Jennifer Moon, Senior Lecturer Biology Instruction Office PhD, Indiana University at Bloomington, 2004

Raymond J Mooney, Professor Professorship in Computer Sciences #3 Computer Science PhD, University of Illinois at Urbana-Champaign, 1987

C F Moore, Professor Emeritus Physics PhD, Florida State University, 1964

J S Moore II, Professor Emeritus Computer Science PhD, University of Edinburgh, 1973

Pedro F Morales, Lecturer Mathematics PhD, Baylor University, 2012

Nancy A Moran, Professor Warren J. and Viola Mae Raymer Chair, Leslie Surginer Endowed Professorship Biology Instruction Office PhD, University of Michigan-Ann Arbor, 1982

Hitoshi Morikawa, Associate Professor Neuroscience PhD, Kyoto University, 1999

Philip J Morrison, Professor Physics PhD, University of California-San Diego, 1979

Dana Hadar Moshkovitz Aaronson, Associate Professor

Computer Science PhD, Weizmann Institute of Science, 2008

Rachel K Moyer-Trimyer, Lecturer Human Ecology MEd, University of Texas at Austin, 2001

Peter Mueller, Professor Mathematics PhD, Purdue University Main Campus, 1991

Ulrich G Mueller, Professor William Morton Wheeler-Lost Pines Professorship Biology Instruction Office PhD, Cornell University, 1993

Charles B Mullins, Professor Z. D. Bonner Professorship of Chemical Engineering, Matthew Van Winkle Regents Professorship in Chemical Engineering Chemistry PhD, California Institute of Technology, 1990

Petr Munk, Professor Emeritus Chemistry PhD, In of Macromole Chem, 1961

Richard F Nauert, Adjunct Associate Professor Human Ecology PhD, University of Texas at Austin, 2002

Ian Michael Nauhaus, Assistant Professor Neuroscience PhD, University of California-Los Angeles, 2008

Joseph Neeman, Assistant Professor Mathematics PhD, University of California-Berkeley, 2013

Lisa Ann Neff, Associate Professor Human Ecology PhD, University of Florida, 2002

Andrew M Neitzke, Associate Professor Mathematics PhD, Harvard University, 2005

Joel H Nibert, Lecturer Mathematics PhD, University of Southern California, 2012

Scott David Niekum, Assistant Professor Computer Science PhD, University of Massachusetts, 2013

Hiroshi Nishiyama, Associate Professor Neuroscience PhD, Kyoto University, 2002

Qian Niu, Professor Trull Centennial Professorship in Physics #1 Physics PhD, University of Washington - Seattle, 1985

Alison N Norman, Lecturer Computer Science PhD, University of Texas at Austin, 2010

Gordon S Novak Jr, Professor Computer Science

### PhD, University of Texas at Austin, 1976

Theresa J O'Halloran, Associate Professor Molecular Biosciences PhD, University of North Carolina at Chapel Hill, 1986

Melvin E Oakes, Professor Emeritus Physics PhD, Florida State University, 1964

Howard Ochman, Professor Biology Instruction Office PhD, University of Rochester, 1984

Gustavo Ochoa, Specialist Biology Instruction Office MS, University of Texas at Austin, 2015

J T Oden, Professor Cockrell Family Regents Chair in Engineering #2, Peter O'Donnell, Jr. Centennial Chair in Computing Systems Computer Science Mathematics PhD, Oklahoma State University Main Campus, 1962

Stella S Offner, Assistant Professor Astronomy PhD, University of California-Berkeley, 2009

Yousef Mazen Okasheh, Specialist Chemistry BS, University of Texas at Austin, 2016

Vicki Olubukola Oladoyin, Specialist Chemistry MS, Mississippi College, 2017

Abiodun Oluyomi, Clinical Assistant Professor Human Ecology PhD, University of Texas Health Science Center at Houston, 2011

Peter Onyisi, Assistant Professor Physics PhD, Cornell University, 2008

Matthew Orap, Specialist Chemistry BS, University of Texas at Austin, 2016

Raymond Lee Orbach, Professor Physics PhD, University of California-Berkeley, 1960

Sophia Alexandra Ortega, Specialist Chemistry BS, University of Texas at Austin, 2017

Karen L Ostlund, Lecturer PhD, University of Minnesota-Twin Cities, 1983

Glen Otto, Clinical Professor Biology Instruction Office DVM, University of Minnesota-Twin Cities, 1987

Sarah Danielle Ozuna, Specialist Human Ecology BS, University of Texas at Austin, 2013

Sonia Paban, Associate Professor Physics PhD, University of Barcelona, 1988

Bruce P Palka, Professor Emeritus Mathematics PhD, University of Michigan-Ann Arbor, 1972

Jose L Panero, Associate Professor Biology Instruction Office PhD, University of Tennessee, 1990

Diane Papillion, Lecturer Human Ecology MPH, University of North Carolina at Chapel Hill, 2001

Patrick H Parker, Specialist Biology Instruction Office BS, Augusta State University, 2005

Jonathan D Partridge, Lecturer Biology Instruction Office PhD, University of Sheffield, 2005

Stefania Patrizi, Assistant Professor Mathematics PhD, Universita degli Studi di Roma La Sapienza, 2010

Yale N Patt, Professor Ernest Cockrell, Jr. Centennial Chair in Engineering Computer Science PhD, Stanford University, 1966

Kristin D Patterson, Lecturer Biology Instruction Office PhD, University of Texas at Austin, 1998

Tanya T Paull, Professor Burl G. and Lorene L. Rogers Chair in Human Health Molecular Biosciences PhD, University of California-Los Angeles, 1996

Natasa Pavlovic, Professor Mathematics PhD, University of Illinois at Chicago, 2002

Shelley M Payne, Professor Molecular Biosciences PhD, Tex Hlth Sci C Dallas, U, 1977

Gergina Pencheva, Lecturer Mathematics PhD, University of Pittsburgh, Pittsburgh Campus, 2007

Timothy Perutz, Associate Professor Mathematics PhD, University of London, 2005

Simon Peter, Assistant Professor Computer Science PhD, Swiss Federal Institute of Technology, 2012

Steven M Phelps, Associate Professor Biology Instruction Office PhD, University of Texas at Austin, 1999

Eric R Pianka, Professor Denton A. Cooley Centennial Professorship in Zoology Biology Instruction Office PhD, University of Washington - Seattle, 1990

Jonathan T Pierce-Shimomura, Associate Professor

Neuroscience PhD, University of Oregon, 2000

Keshav K Pingali, Professor W. A. "Tex" Moncrief, Jr. Chair in Distributed and Grid Computing Computer Science ScD, Massachusetts Institute of Technology, 1986

C Greg Plaxton, Professor Computer Science PhD, Stanford University, 1989

Martin Poenie, Associate Professor Molecular Biosciences PhD, Stanford University, 1986

Luis R Polanco, Specialist Chemistry MA, University of Texas at Austin, 2017

George D Pollak, Professor Neuroscience PhD, University of Maryland College Park, 1970

Mark T Pope, Lecturer Human Ecology PhD, University of Texas at Austin, 2011

Bruce W Porter, Professor Computer Science PhD, University of California-Irvine, 1984

Andrew Potter, Assistant Professor Physics PhD, Massachusetts Institute of Technology, 2013

Natalie Shepherd Poulos, Lecturer Human Ecology PhD, University of Texas at Austin, 2015

Pamela G Powell, Clinical Associate Professor MEd, University of Texas at Austin, 1993

William H Press, Professor Warren J. and Viola Mae Raymer Chair, Leslie Surginer Endowed Professorship Biology Instruction Office Computer Science PhD, California Institute of Technology, 1972

Alison R Preston, Associate Professor Neuroscience PhD, Stanford University, 2004

Eric Price, Assistant Professor Computer Science PhD, Massachusetts Institute of Technology, 2013

Melinda Price, Adjunct Assistant Professor Computer Science BS, University of Texas at Austin, 1993

Nicholas J Priebe, Associate Professor Neuroscience PhD, University of California-San Francisco, 2001

Chris Prosise, Adjunct Assistant Professor Computer Science BSEE, Duke University, 1994 Hong Qiao, Assistant Professor Molecular Biosciences PhD, Chinese Academy of Sciences, 2004

Lili Qiu, Professor Computer Science PhD, Cornell University, 2001

Emily Que, Assistant Professor Chemistry PhD, University of California-Berkeley, 2009

Heather M Quimby, Lecturer Human Ecology PhD, Fielding Graduate Institute, 2016

Charles L Radin, Professor Mathematics PhD, University of Rochester, 1971

Saydur Rahman, Adjunct Professor Marine Science PhD, Univ of the Ryukyus, 2001

Mark G Raizen, Professor Sid W. Richardson Foundation Regents Chair in Physics #2 Physics PhD, University of Texas at Austin, 1989

Vijaya Ramachandran, Professor William B. Blakemore II Regents Professorship in Computer Sciences Computer Science PhD, Princeton University, 1983

Michael W Raney, Lecturer PhD, University of Texas at Austin, 1991

Mary A Rankin, Professor Emeritus Biology Instruction Office PhD, University of Iowa, 1972

Joanne M Ravel, Professor Emeritus Chemistry PhD, University of Texas at Austin, 1954

Megan C Regnier, Adjunct/Clinical Affiliate PsyD, Florida State University, 2009

Linda E Reichl, Professor Physics PhD, University of Denver, 1969

Jan S Rellermeyer, Adjunct Assistant Professor Computer Science PhD, Swiss Federal Institute of Technology, 2011

Han Ren, Lecturer Human Ecology PhD, University of Texas at Austin, 2015

Kui Ren, Associate Professor Mathematics PhD, Columbia University in the City of New York, 2006

Alessandro Rezende De Macedo, Specialist Mathematics PhD, University of Texas at Austin, 2017

Phyllis L Richards, Professor Emeritus Human Ecology

### PhD, Florida State University, 1964

Dick Richardson, Professor Emeritus Biology Instruction Office PhD, North Carolina State University, 1965

Judit G Ries, Lecturer Astronomy PhD, University of Texas at Austin, 1992

Peter J Riley, Professor Emeritus Physics PhD, University of Alberta, 1962

Jack L Ritchie, Professor Physics PhD, University of Rochester, 1984

Paul Anthony Robbins, Lecturer PhD, University of Texas at Austin, 2015

Sean Thomas Roberts, Assistant Professor Chemistry PhD, Massachusetts Institute of Technology, 2009

Jon D Robertus, Professor Emeritus Molecular Biosciences PhD, University of California-San Diego, 1972

Catherine J Robinson, Specialist Human Ecology MEd, Texas State University-San Marcos, 2011

Edward L Robinson, Professor William B. Blakemore II Regents Professorship in Astronomy Astronomy PhD, University of Texas at Austin, 1973

Altha B Rodin, Senior Lecturer Mathematics PhD, University of Texas at Austin, 1988

Shelly R Rodriguez, Clinical Associate Professor MA, University of Texas at Austin, 2003

Michael Rose, Assistant Professor Chemistry PhD, University of California-Santa Cruz, 2009

Haskell P Rosenthal, Professor Emeritus Mathematics PhD, Stanford University, 1965

Christopher J Rossbach, Assistant Professor Computer Science PhD, University of Texas at Austin, 2009

Stanley J Roux Jr, Professor Molecular Biosciences PhD, Yale University, 1971

David Rusin, Lecturer Mathematics PhD, University of Chicago, 1984

Rick Russell, Professor Molecular Biosciences PhD, Johns Hopkins University, 1998

Stephen Thomas Russell, Professor

Priscilla Pond Flawn Regents Professorship in Child Development Human Ecology PhD, Duke University, 1994

Michael J Ryan, Professor Clark Hubbs Regents Professorship in Zoology Biology Instruction Office PhD, Cornell University, 1982

Holly S Ryon, Lecturer Human Ecology PhD, University of Texas at Austin, 2014

Lorenzo A Sadun, Professor Mathematics PhD, University of California-Berkeley, 1987

Cynthia Saldivar Fitchpatrick, Lecturer Human Ecology MEd, University of Texas at Austin, 1996

David J Saltman, Professor Emeritus Mathematics PhD, Yale University, 1976

Bob G Sanders, Professor Emeritus Molecular Biosciences PhD, Pennsylvania State University Park, 1961

Krishnakali Sarkar, Specialist Biology Instruction Office MS, University of Texas at Austin, 2014

Sahotra Sarkar, Professor Biology Instruction Office PhD, University of Chicago, 1989

K Sata Sathasivan, Senior Lecturer Biology Instruction Office PhD, Louisiana State University and Agricultural and Mechanical College, 1991

Kanthimathi Sathasivan, Lecturer Mathematics PhD, University of Texas at Austin, 2011

Jennette Saunders, Specialist Chemistry BS, University of Texas at Austin, 2016

Inder M Saxena, Lecturer Biology Instruction Office PhD, Jawaharlal Nehru University, 1984

Pratibha Saxena, Lecturer Biology Instruction Office PhD, Jawaharlal Nehru University, 1983

John M Scalo, Professor Astronomy PhD, University of California-Los Angeles, 1973

Livia Schiavinato Eberlin, Assistant Professor Chemistry PhD, Purdue University Main Campus, 2012

William C Schieve, Professor Emeritus Physics PhD, Lehigh University, 1959 Benjamin Schmidt, Instructor Mathematics PhD, Ohio State U Main Campus, 2016

Evelyn M Schultz, Lecturer Mathematics MA, Duke University, 1972

William Schwartz, Professor Biology Instruction Office MD, University of California-San Francisco, 1974

Roy F Schwitters, Professor Sid W. Richardson Foundation Regents Chair in Physics #4 Physics PhD, Massachusetts Institute of Technology, 1971

Michael D Scott, Distinguished Senior Lecturer Computer Science MS, Rensselaer Polytechnic Institute, 1998

Eyal Seidemann, Professor Neuroscience PhD, Stanford University, 1998

Robert M Seitsinger, Adjunct Assistant Professor Computer Science MS, Boston University, 1998

Eric Senning, Assistant Professor Neuroscience PhD, University of Oregon, 2009

Jonathan L Sessler, Professor R. P. Doherty, Jr. - Welch Regents Chair in Chemistry Chemistry PhD, Stanford University, 1982

Shagufta H Shabbir, Lecturer Chemistry PhD, University of Texas at Austin, 2009

Paul R Shapiro, Professor Frank N. Edmonds, Jr. Regents Professorship in Astronomy Astronomy PhD, Harvard University, 1978

Jason B Shear, Professor Chemistry PhD, Stanford University, 1994

Ruth I Shear Chemistry PhD, Griffith University, 1991

Yunyi Shen, Lecturer Mathematics PhD, Florida State University, 2017

Jian Sheng, Adjunct Associate Professor Marine Science PhD, Johns Hopkins University, 2006

Chih-Kang Shih, Professor Dr. Arnold Romberg Endowed Chair in Physics Physics PhD, Stanford University, 1988

Frank T Shirley, Lecturer

Mathematics PhD, University of Texas at Austin, 1984

Ralph E Showalter, Professor Emeritus Mathematics PhD, University of Illinois at Urbana-Champaign, 1968

Gennady Shvets, Adjunct Professor Physics PhD, Massachusetts Institute of Technology, 1995

Beryl B Simpson, Professor Emeritus Biology Instruction Office PhD, Harvard University, 1968

Michael C Singer, Professor Emeritus Biology Instruction Office PhD, University of Oxford, 1971

Mihai Sirbu, Associate Professor Mathematics PhD, Carnegie Mellon University, 2004

Greg O Sitz, Professor Physics PhD, Stanford University, 1987

James Carter Smith, Specialist Mathematics BS, University of Texas at Austin, 2017

Christopher A Sneden, Professor Rex G. Baker, Jr. and McDonald Observatory Centennial Research Professorship in Astronomy Astronomy PhD, University of Texas at Austin, 1974

D M Snodderly, Professor Human Ecology Neuroscience PhD, Rockefeller University, 1969

Stacy C Sparks, Senior Lecturer Chemistry PhD, University of Texas at Austin, 1999

Emily E Spencer, Specialist Human Ecology BS, Texas A & M University, 2016

Hallie G Speranza, Senior Lecturer Human Ecology MA, University of Texas at Austin, 1991

John F Stanton, Adjunct Professor Chemistry PhD, Harvard University, 1989

Michael P Starbird, Professor Mathematics PhD, University of Wisconsin-Madison, 1974

Eric Joseph Staron, Lecturer Mathematics PhD, University of Texas at Austin, 2012

David S Stein, Professor Molecular Biosciences PhD, Stanford University, 1989 Lydia C Steinman, Adjunct/Clinical Affiliate Human Ecology Human Ecology MA, University of Texas at Austin, 1987

Scott W Stevens, Associate Professor Molecular Biosciences PhD, University of North Carolina at Chapel Hill, 1996

Keith J Stevenson, Adjunct Professor Joseph J. & Jeanne M. Lagowski Regents Professorship in Inorganic Chemistry PhD, University of Utah, 1997

Shannon N Stokes, Lecturer Chemistry PhD, University of Texas at Austin, 2009

Peter H Stone, Professor David Bruton, Jr. Centennial Professorship in Computer Sciences #3 Computer Science PhD, Carnegie Mellon University, 1998

John Rudi Strickler, Adjunct Professor Marine Science PhD, Swiss Federal Institute of Technology, 1969

Thomas Struppeck, Lecturer Mathematics PhD, University of Texas at Austin, 1989

Sawyer Elizabeth Stubbs, Specialist Biology Instruction Office BS, University of Texas at Austin, 2017

George Sudarshan, Professor Emeritus Physics PhD, University of Rochester, 1958

Christopher S Sullivan, Associate Professor Molecular Biosciences PhD, University of Pittsburgh, Pittsburgh Campus, 2000

Sibum Sung, Associate Professor Molecular Biosciences PhD, University of Wisconsin-Madison, 2004

Catherine A Surra, Professor Emeritus Human Ecology PhD, Pennsylvania State University Main Campus, 1980

Sara J Sutcliffe, Lecturer Chemistry PhD, University of Texas at Austin, 2000

Harry E Sutton, Professor Emeritus Molecular Biosciences PhD, University of Texas at Austin, 1953

Sara J Sweitzer, Lecturer Human Ecology PhD, University of Texas at Austin, 2009

Jack B Swift, Professor Emeritus Physics PhD, University of Illinois at Urbana-Champaign, 1968

Harry L Swinney, Professor

Sid W. Richardson Foundation Regents Chair in Physics #3 PhD, Johns Hopkins University, 1968

Paul J Szaniszlo, Professor Emeritus Molecular Biosciences PhD, University of North Carolina at Chapel Hill, 1967

Thibaud Olivier Taillefumier, Assistant Professor Mathematics Neuroscience PhD, Rockefeller University, 2012

Michael Tang, Specialist Chemistry BS, University of Texas at Austin, 2017

John T Tate, Professor Emeritus Mathematics PhD, Princeton University, 1950

Amelia J Tate-Looney, Specialist Chemistry BS, University of Texas at Austin, 2016

David W Taylor Jr, Assistant Professor Molecular Biosciences PhD, Yale University, 2013

Melissa Anne Taylor, Specialist MEd, University of Texas at Austin, 2012

Richard A Taylor, Lecturer Human Ecology PhD, University of South Florida, 2003

Edward C Theriot, Professor Jane and Roland Blumberg Centennial Professorship in Molecular Evolution Biology Instruction Office PhD, University of Michigan-Ann Arbor, 1983

Ann Thijs, Lecturer Biology Instruction Office PhD, University of Texas at Austin, 2014

Devarajan Thirumalai, Professor Larry R. Faulkner Departmental Chair for Excellence in Chemistry and Biochemistry, Marvin K. Collie-Welch Regents Chair in Chemistry Chemistry Physics PhD, University of Minnesota-Twin Cities, 1982

Melissa M Thomas, Lecturer JD, University of Texas at Austin, 2005

Peter Thomas, Professor H-E-B Endowed Chair in Marine Science Biology Instruction Office Marine Science PhD, University of Leicester, 1978

Guy Thompson, Professor Emeritus Molecular Biosciences PhD, California Institute of Technology, 1959

James C Thompson, Professor Emeritus Physics

### PhD, Rice University, 1956

Wesley J Thompson Biology Instruction Office PhD, University of California-Berkeley, 1975

Xiaochuan Tian, Instructor Mathematics PhD, Columbia University in the City of New York, 2017

Stefano Tiziani, Assistant Professor Human Ecology PhD, Ohio State U Main Campus, 2006

Zachary N Tobin, Specialist Chemistry BS, University of Texas at Austin, 2017

Paul K Toprac, Senior Lecturer Computer Science PhD, University of Texas at Austin, 2008

Ngoc Tran, Assistant Professor Mathematics PhD, University of California-Berkeley, 2013

Sydney Tran, Specialist Biology Instruction Office BS, University of Texas at Austin, 2017

Philip U Treisman, Professor Mathematics PhD, University of California-Berkeley, 1985

Michael Stephen Trent Biology Instruction Office PhD, East Tennessee State University, 1998

Lauren Nicole Trotter, Specialist Biology Instruction Office BS, University of Texas at Austin, 2016

Thomas M Truskett, Professor Bill L. Stanley Endowed Leadership Chair in Chemical Engineering, Les and Sherri Stuewer Endowed Professorship in Chemical Engineering Physics PhD, Princeton University, 2001

Yen-Hsi Tsai, Professor Mathematics PhD, University of California-Los Angeles, 2002

Kiryl Tsishchanka, Lecturer Mathematics PhD, The National Academy of Sciences of Belarus, 1998

Maxim Tsoi, Professor Physics PhD, Universitat Konstanz, 1998

Haley Tucker, Professor Marie Betzner Morrow Centennial Chair Molecular Biosciences PhD, Texas A & M University, 1975

Billie L Turner, Professor Emeritus Biology Instruction Office PhD, Washington State University, 1953

Takeshi Udagawa, Professor Emeritus

Physics PhD, Univ of Tsukuba, 1962

Karen Uhlenbeck, Professor Emeritus Mathematics PhD, Brandeis University, 1968

Emin T Ulug, Senior Lecturer Biology Instruction Office PhD, University of Texas at Austin, 1984

Jason Upton, Assistant Professor Molecular Biosciences PhD, Washington University in St Louis, 2006

Jeffrey D Vaaler, Professor Emeritus Mathematics PhD, University of Illinois at Urbana-Champaign, 1974

Robert A Van De Geijn, Professor Computer Science PhD, University of Maryland University College, 1987

David A Vandenbout, Professor Chemistry PhD, University of Texas at Austin, 1995

Fatima Alesia Varner, Assistant Professor Human Ecology PhD, Northwestern University, 2010

Alexis F Vasseur, Professor John T. Stuart III Centennial Professorship in Mathematics Mathematics PhD, Universite de Paris VI, Pierre et Marie Curie, 1999

Vijaychidambaram Velayudhan Pillai, Assistant Professor Computer Science PhD, University of Wisconsin Colleges, 2013

Laura Villafuerte Altuzar, Lecturer Mathematics PhD, Universidad Politecnica de Valencia, 2007

Tracy A Villareal, Professor Marine Science Marine Science PhD, University of Rhode Island, 1989

Mikhail M Vishik, Professor Mathematics PhD, University of Moscow, 1980

Brittney Voigt, Specialist Biology Instruction Office BSArt, University of Texas at Austin, 2016

Steven A Vokes, Associate Professor Molecular Biosciences PhD, University of Texas at Austin, 2002

Paul E Vouga, Assistant Professor Computer Science PhD, Columbia University in the City of New York, 2011

James Wadman, Specialist Chemistry BS, University of Texas at Austin, 2014

Francois Waelbroeck, Research Professor (Affiliated)

Physics PhD, University of Texas at Austin, 1988

Alisa H Walch, Lecturer Mathematics MA, University of Texas at Austin, 2008

Andrew Robert Waldeck, Specialist Chemistry PhD, University of Texas at Austin, 2016

Michael H Walfish, Adjunct Assistant Professor Computer Science PhD, Massachusetts Institute of Technology, 2008

Deborah R Walker, Lecturer Chemistry PhD, University of Texas at Austin, 2005

James R Walker, Professor Molecular Biosciences PhD, University of Texas at Austin, 1963

Stephen G Walker, Professor Paul D. and Betty Robertson Meek and American Petrofina Foundation Centennial Professorship in Business Mathematics PhD, Imperial College of Science, Technology and Medicine, University of London, 1995

John B Wallingford, Professor William and Gwyn Shive Endowed Professorship Molecular Biosciences PhD, University of Texas at Austin, 1998

Dale E Walston, Associate Professor Emeritus Mathematics PhD, University of Texas at Austin, 1961

Benjamin D Walther, Adjunct Assistant Professor Marine Science PhD, Woods Hole Oceanographic Institution, 2007

Rachel A Ward, Associate Professor Mathematics PhD, Princeton University, 2009

Pamela J Way, Lecturer PhD, University of Texas at Austin, 2002

Lauren J Webb, Associate Professor Chemistry PhD, California Institute of Technology, 2005

Stephen E Webber, Professor Emeritus Chemistry PhD, University of Chicago, 1965

Karen A Weems, Lecturer MEd, University of Texas at Austin, 1989

Steven Weinberg, Professor Jack S. Josey - Welch Foundation Chair in Science Astronomy Physics PhD, Princeton University, 1957

Rush S Wells Iv, Adjunct Professor Biology Instruction Office PhD, Harvard University, 1994

John C Wheeler, Professor Samuel T. and Fern Yanagisawa Regents Professorship in Astronomy Astronomy PhD, University of Colorado at Boulder, 1969

Mary F Wheeler, Professor Ernest and Virginia Cockrell Chair in Engineering Mathematics PhD, Rice University, 1971

Andrew B Whinston, Professor Hugh Roy Cullen Centennial Chair in Business Administration Computer Science PhD, Carnegie Mellon University, 1962

Marvin Whiteley Biology Instruction Office PhD, University of Iowa, 2001

Diane J Whitmer, Adjunct Assistant Professor Biology Instruction Office PhD, University of California-San Diego, 2008

Alexander L Wild, Lecturer Biology Instruction Office Biology Instruction Office PhD, University of California-Davis, 2005

Claus O Wilke, Professor Biology Instruction Office PhD, Ruhr-Universitat Bochum, 1999

Robert F Williams, Professor Emeritus Mathematics PhD, University of Virginia (Old Code), 1954

Hannah Williamson, Assistant Professor Human Ecology PhD, University of California-Los Angeles, 2017

Richard A Willis, Professor Emeritus Human Ecology PhD, University of Oklahoma Health Sciences Center, 1979

Derek Wills, Professor Emeritus Astronomy PhD, University of Cambridge, 1966

Carlton G Willson, Professor Rashid Engineering Regents Chair Chemistry PhD, University of California-Berkeley, 1974

Don Winget, Professor Harlan J. Smith Centennial Professorship in Astronomy Astronomy PhD, University of Rochester, 1982

Emmett Witchel, Professor Computer Science PhD, Massachusetts Institute of Technology, 2004

Kristin D Wolesensky, Specialist Mathematics MS, University of Nebraska - Lincoln, 1990

William R Wolesensky, Lecturer

Mathematics PhD, University of Nebraska - Lincoln, 2002

William David Wood Iv, Specialist Chemistry BS, University of Texas at Austin, 2017

Matthew Worden, Lecturer Chemistry PhD, Kent State University Main Campus, 2015

Robert E Wyatt, Professor Emeritus Chemistry PhD, Johns Hopkins University, 1965

Dennis C Wylie, Lecturer Biology Instruction Office PhD, University of California-Berkeley, 2006

Blerta Xhemalce, Assistant Professor Molecular Biosciences PhD, Universite de Paris VII, Denis Diderot, 2006

Zhen Yao, Associate Professor Physics PhD, Harvard University, 1997

Maha Yaqub, Specialist Human Ecology BS, University of Texas at Austin, 2017

George A Yatskievych, Lecturer Biology Instruction Office PhD, Indiana University at Bloomington, 1990

Lauren A Yeager, Assistant Professor Marine Science PhD, Florida International University, 2013

John A Yeazell, Lecturer Physics PhD, University of Rochester, 1989

Rose J Yeh, Specialist Chemistry BS, University of Texas at Austin, 2017

William D Young, Senior Lecturer Computer Science PhD, University of Texas at Austin, 1988

Cheng Yu, Lecturer Mathematics PhD, University of Pittsburgh, Pittsburgh Campus, 2013

Harold H Zakon, Professor Biology Instruction Office Neuroscience PhD, Cornell University, 1981

Thaleia Zariphopoulou, Professor Chair in Mathematics, V. F. Neuhaus Centennial Professorship in Finance Mathematics PhD, Brown University, 1989

Boris Zemelman, Assistant Professor Neuroscience PhD, Stanford University, 1997 Yan Zhang, Associate Professor Molecular Biosciences PhD, The Scripps Research Institute, 2004

Gordan Zitkovic, Professor Mathematics PhD, Columbia University in the City of New York, 2003

Janeta Zoldan, Assistant Professor PhD, Technion-Israel Institute of Technology, 2004

Cynthia Zoski, Research Professor (Affiliated) Chemistry PhD, Queens University, 1985

David I Zuckerman, Professor Professorship in Computer Sciences #1 Computer Science PhD, University of California-Berkeley, 1991

# **School of Nursing Faculty**

The following faculty list represents those appointed in the 2018 spring semester.

Christine W Abbyad, Associate Professor of Clinical Nursing PhD, University of Texas at Austin, 2008

Gayle J Acton, Associate Professor PhD, University of Texas at Austin, 1993

Joy O Adeku, Instructor in Clinical Nursing MSN, University of Texas at Austin, 2015

Larissa K Alberson, Instructor in Clinical Nursing MSN, University of Texas at Austin, 2014

Marta Anderson, Instructor in Clinical Nursing MSN, University of Phoenix - Phoenix, 2005

Jessica Lee Barr, Instructor in Clinical Nursing MSN, University of Texas at Austin, 2016

John E Bellquist, Communications Professional (Part-Time) PhD, University of California-Berkeley, 1980

Mary M Benham-Hutchins, Assistant Professor PhD, University of Arizona, 2008

Adam Blank, Instructor in Clinical Nursing MSN, University of Texas at Austin, 2015

Eliezer Bose, Assistant Professor PhD, University of Pittsburgh, Pittsburgh Campus, 2015

Billye J Brown, Professor Emeritus EdD, Baylor University, 1975

Richard A Brown, Research Professor PhD, University of Oregon, 1981

Patricia A Carter, Associate Professor PhD, University of California-Los Angeles, 1999

Sharon L Carter, Instructor in Clinical Nursing MS, Ball State University, 2011

Jane Dimmitt Champion, Professor Lee and Joseph D. Jamail Endowed Professorship in Nursing PhD, University of Texas Health Science Center at San Antonio, 1994

Brittany Paige Christiansen, Assistant Professor of Clinical Nursing DNP, University of Texas at Austin, 2017

Angela P Clark, Associate Professor Emeritus PhD, Texas Woman's University - Denton, 1983

Nola E Cottom, Instructor in Clinical Nursing MSN, University of Texas at Austin, 1977

Heather E Cuevas, Assistant Professor of Clinical Nursing PhD, University of Texas at Austin, 2013

Valerie Danesh, Assistant Professor PhD, University of Central Florida, 2015

Carol L Delville, Assistant Professor of Clinical Nursing PhD, University of Texas at Austin, 2008

Christine A Divin, Assistant Professor of Clinical Nursing PhD, University of Texas at Austin, 2015

Danielle Duquette, Instructor in Clinical Nursing MSN, Frontier School of Midwifery & Family Nursing, 2016

Carly E Edgar, Instructor in Clinical Nursing MSN, Texas Woman's University - Denton, 2006

Helen L Erickson, Professor Emeritus PhD, University of Michigan-Ann Arbor, 1984

Alexandra A Garcia, Associate Professor PhD, University of Texas at Austin, 2002

Carol D Gaskamp, Associate Professor of Clinical Nursing PhD, University of Kansas Main Campus, 2000

Leigh A Goldstein, Assistant Professor of Clinical Nursing PhD, University of Texas at Austin, 2013

Susan J Grobe, Professor Emeritus PhD, University of Texas at Austin, 1977

Nancy M Guillet, Instructor in Clinical Nursing MSN, University of Texas at Austin, 2011

Tatyana Gustafson, Instructor in Clinical Nursing MSN, University of Texas at Austin, 2007

Lorraine C Haertel, Assistant Professor of Clinical Nursing PhD, University of Texas at Austin, 1985

Beverly A Hall, Professor Emeritus PhD, University of Colorado at Boulder, 1974

Patricia Lee Hamilton-Solum, Assistant Professor of Clinical Nursing PhD, University of Texas at Austin, 2011

Tracie C Harrison, Professor PhD, University of Texas at Austin, 2004

Sherry G Hendrickson, Associate Professor of Clinical Nursing PhD, University of Texas at Austin, 2000

Jennifer Hensley, Associate Professor of Clinical Nursing EdD, University of Southern California, 1996

Janice F Hernandez, Instructor in Clinical Nursing MSN, University of Texas at Austin, 2009

April Alonzo Herrera, Instructor in Clinical Nursing

MSN, University of Texas at Austin, 2012

Amy R Holland, Instructor in Clinical Nursing MSN, University of Texas at Austin, 2007

Sharon D Horner, Professor Dolores V. Sands Chair in Nursing Research PhD, Medical College of Georgia, 1992

Shalonda E Horton, Assistant Professor of Clinical Nursing PhD, University of Texas at Austin, 2015

Sheryl A Innerarity, Associate Professor of Clinical Nursing PhD, Texas Woman's University - Denton, 1987

Karen Johnson, Assistant Professor PhD, University of Minnesota-Twin Cities, 2012

Glenda L Joiner-Rogers, Assistant Professor of Clinical Nursing PhD, University of Texas at Austin, 1988

Stephanie M Key, Instructor in Clinical Nursing MA, University of Texas at Austin, 1999

Latashia V Kiel, Instructor in Clinical Nursing MSN, University of Texas at Austin, 2014

Miyong Kim, Professor La Quinta Motor Inns, Inc. Centennial Professorship in Nursing PhD, University of Arizona, 1996

Jung Kwak, Associate Professor PhD, University of South Florida, 2006

Li-Chen Lin, Assistant Professor of Clinical Nursing PhD, University of Texas at Austin, 2009

Elizabeth Ann Loika, Associate Professor of Clinical Nursing DNP, Vanderbilt University, 2011

Jessica Elizabeth Meinhardt-Salazar, Instructor in Clinical Nursing MSN, University of Texas at Austin, 2011

Martha G Meraviglia, Associate Professor of Clinical Nursing PhD, University of Texas at Austin, 2001

Stephanie Morgan, Professor of Clinical Nursing PhD, University of Texas at Austin, 2013

Laura E Murphy, Instructor in Clinical Nursing MSN, University of Texas at Austin, 2009

Jennifer J Murray-Chavez, Instructor in Clinical Nursing MSN, University of Texas at Austin, 2008

Esther Nwokocha, Instructor in Clinical Nursing MSN, Pennsylvania State University Park, 2016

Brenda Olmos, Instructor in Clinical Nursing MSN, Texas State University, 2017

Nicole Osier, Assistant Professor PhD, University of Pittsburgh, Pittsburgh Campus, 2016

Marnie Otto, Instructor in Clinical Nursing MSN, University of Texas at Austin, 2017

Joy H Penticuff, Professor Emeritus PhD, Case Western Reserve University, 1976

Kavita Radhakrishnan, Assistant Professor

### PhD, University of Massachusetts, 2011

Donna L Rew, Professor Denton and Louise Cooley and Family Centennial Professorship in Nursing EdD, Northern Illinois University, 1979

Anna Rivera, Instructor in Clinical Nursing MSN, University of Phoenix - Phoenix, 2006

Mary E Roche, Instructor in Clinical Nursing MSN, University of Texas at Austin, 2012

Donna G Rolin, Assistant Professor of Clinical Nursing PhD, New York University, 2012

Mary Kathryn Sanders, Assistant Professor of Clinical Nursing DNP, Indiana Wesleyan University, 2015

Dolores Sands, Professor Emeritus PhD, Arizona State University Main, 1979

Rosa N Schnyer, Clinical Assistant Professor DAOM, Oregon College of Oriental Medicine, 2008

Amber Nicole Sherman, Instructor in Clinical Nursing MSN, University of Texas at Austin, 2016

Annmarie Staats, Instructor in Clinical Nursing MSN, Mercy College, 2006

Bobbie S Sterling, Assistant Professor of Clinical Nursing PhD, University of Texas at Austin, 2001

Alexa M Stuifbergen, Professor Laura Lee Blanton Chair in Nursing, James R. Dougherty, Jr. Centennial Professorship in Nursing PhD, University of Texas at Austin, 1988

Lisa L Sumlin, Assistant Professor of Clinical Nursing PhD, University of Texas at Austin, 2014

Danica Fulbright Sumpter, Assistant Professor of Clinical Nursing PhD, University of Pennsylvania, 2009

Laura M Swarts, Instructor in Clinical Nursing MSN, University of Texas at Austin, 2012

Jean C Taxis, Associate Professor of Clinical Nursing PhD, University of Texas at Austin, 2003

Gayle M Timmerman, Associate Professor PhD, Ohio State U Main Campus, 1994

Ana T Todd, Assistant Professor of Clinical Nursing PhD, University of Texas at Austin, 2013

Mary Tuttle DNP, Fairfield University, 2013

Deborah L Volker, Associate Professor Emeritus PhD, University of Texas at Austin, 1999

Mary K Wakefield, Visiting Professor PhD, University of Texas at Austin, 1985

Lorraine O Walker, Professor Luci B. Johnson Centennial Professorship in Nursing EdD, Indiana University at Bloomington, 1971

Veronica Garcia Walker, Assistant Professor of Clinical Nursing

PhD, University of Texas at Austin, 2014

Charlotte K Wilson, Instructor in Clinical Nursing MSN, Texas Woman's University - Houston, 1988

Darlene M Wilson, Instructor in Clinical Nursing MSN, University of Texas at Austin, 1998

Bo Xie, Associate Professor PhD, Rensselaer Polytechnic Institute, 2006

Linda H Yoder, Associate Professor PhD, University of Pennsylvania, 1992

Cara Young, Assistant Professor PhD, Vanderbilt University, 2010

Julie A Zuniga, Assistant Professor PhD, University of Texas at Austin, 2013

# **College of Pharmacy Faculty**

The following faculty list represents those appointed in the 2018 spring semester.

Daniel Acosta Jr, Adjunct Professor PhD, University of Kansas Main Campus, 1974

Wyanza R Acosta, Clinical Professor MS, University of Texas at Austin, 1998

Selina M Aguilar, Clinical Assistant Professor PharmD, University of Texas at Austin, 2008

Lydia Aguilera, Adjunct Assistant Professor PharmD, University of Florida, 2008

Jon T Albrecht, Clinical Assistant Professor BS, Auburn University, 1982

Linda S Albrecht, Clinical Assistant Professor MBA, University of Texas at Arlington, 1990

Angela A Allerman, Clinical Assistant Professor PharmD, University of Texas at Austin, 1991

Ogechika K Alozie, Adjunct Assistant Professor MS, University of Minnesota-Twin Cities, 2010

Analiza Amaya-Diaz, Clinical Assistant Professor PharmD, Texas Southern University, 1994

Sharmin Amjad, Instructor in Clinical Pharmacy PharmD, Long Is U Brooklyn C Phar, 2016

Sweta Andrews, Adjunct Assistant Professor PharmD, The University of Findlay, 2014

Gordon Ang, Instructor in Clinical Pharmacy PharmD, Texas A&M University-Kingsville, 2017

Vicente Aparicio, Adjoint Assistant Professor PharmD, University of Texas at Austin, 2016

Grant W Armstrong, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2007

Jasmin Badwal, Instructor in Clinical Pharmacy PharmD, Wayne State University, 2017

Alexis L Balko, Clinical Instructor

### PharmD, University of Texas at Austin, 2006

Jamie C Barner, Professor Clifford L. Klinck, Jr. Centennial Professorship in Pharmacy Administration PhD, Purdue University Main Campus, 1998

James N Barnes, Clinical Assistant Professor PharmD, University of Texas at Austin, 2005

Colleen A Barthol, Adjunct Assistant Professor PharmD, University of Missouri - Kansas City, 1998

Maryam Bayat, Clinical Assistant Professor PharmD, Texas Southern University, 1994

Oralia V Bazaldua, Clinical Assistant Professor PharmD, University of Oklahoma Health Sciences Center, 1996

William Benefield Jr, Clinical Assistant Professor PharmD, University of Texas at Austin, 1991

Jacob Ferguson Beyer, Instructor in Clinical Pharmacy PharmD, Saint Louis College of Pharmacy, 2016

Heather Payton Blacksmith, Adjunct Assistant Professor PharmD, Saint Louis College of Pharmacy, 2010

Roland A Bodmeier, Adjunct Associate Professor PhD, University of Texas at Austin, 1986

Douglas J Borys, Clinical Assistant Professor PharmD, Shenandoah University, 2004

Phillip D Bowman, Adjunct Assistant Professor PhD, University of California-Santa Cruz, 1975

Rebecca L Brady, Clinical Instructor PharmD, University of Texas at Austin, 2006

Steven Jeffrey Braun, Instructor in Clinical Pharmacy PharmD, University of Texas at Austin, 2016

Fred S Brinkley, Lecturer MBA, University of Texas at Austin, 1983

Carolyn M Brown, Professor PhD, University of Florida, 1994

Barry A Browne, Clinical Associate Professor PharmD, University of Texas at Austin, 1987

Aaron R Buchan, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2001

Donna M Burkett, Clinical Associate Professor MS, University of Texas at Austin, 2000

Richard M Cadle PharmD, University of the Pacific, 1983

Angela Hughes Campbell, Clinical Instructor PharmD, University of Texas at Austin, 2005

Todd W Canada, Clinical Assistant Professor PharmD, University of Texas at Austin, 1993

Amy Carr, Instructor in Clinical Pharmacy PharmD, University of Florida, 2016

Jongwha Chang, Adjunct Assistant Professor

PhD, University of Michigan-Ann Arbor, 2012

Ashley N Chasse, Adjunct Assistant Professor PharmD, University of Oklahoma Health Sciences Center, 2013

Lydia D Chen PharmD, University of California-San Francisco, 2013

Pinhui Chen, Instructor in Clinical Pharmacy PharmD, University of Texas at Austin, 2017

Tina Chen, Instructor in Clinical Pharmacy PharmD, Midwestern University (Illinois), 2017

Elaine Chiquette, Clinical Assistant Professor PharmD, University of Texas at San Antonio, 1994

Emily Janel Christenberry, Adjunct Assistant Professor PharmD, Butler University, 2014

Charlene A Church, Clinical Instructor PharmD, University of Texas at Austin, 1996

Andrea L Coffee, Clinical Assistant Professor PharmD, University of Texas at Austin, 1994

Claudia S Colombo, Adjunct Assistant Professor PharmD, Saint Louis College of Pharmacy, 2002

Claudio J Conti, Adjunct Professor PhD, University of Buenos Aires, 1983

Toby L Cooper, Clinical Assistant Professor PharmD, Texas Tech University, 2001

Vicki S Crane, Clinical Assistant Professor MBA, University of Dallas, 1989

David P Crews, Professor PhD, Rutgers the State University of New Jersey Newark Campus, 1973

M Lynn Crismon, Professor James T. Doluisio Regents Chair in Pharmacy, Behrens Inc. Centennial Professorship in Pharmacy, The Hoechst-Roussel Centennial Endowed Professorship in Pharmacy PharmD, University of Texas at Austin, 1979

Barrett R Crowther, Adjunct Assistant Professor PharmD, University of Wisconsin-Madison, 2009

Maria A Croyle, Professor Glaxo Wellcome Inc. Endowed Professorship in Pharmacy PhD, University of Michigan-Ann Arbor, 1997

Bianca Cruz, Adjoint Assistant Professor PharmD, University of Texas at Austin, 2009

Zhengrong Cui, Professor PhD, University of Kentucky, 2002

Nicole L Cupples, Adjunct Assistant Professor PharmD, The University of Findlay, 2010

Molly F Curran, Clinical Assistant Professor PharmD, University of Texas at Austin, 2014

Kevin N Dalby, Professor Johnson & Johnson Centennial Professorship in Pharmacy PhD, University of Cambridge, 1992

Divya M Daniel, Adjunct Assistant Professor

PharmD, University of Tennessee Health Science Center, 2014

Kori Daniels, Instructor in Clinical Pharmacy PharmD, University of Mississippi, 2017

Renee K Danysh, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2006

James A Dasher, Clinical Assistant Professor PharmD, University of Arkansas for Medical Sciences, 1996

Joseph F Dasta, Adjunct Professor MS, Ohio State U Main Campus, 1976

Dewayne A Davidson, Clinical Assistant Professor PharmD, University of Texas at Austin, 2012

Paige Davies, Instructor in Clinical Pharmacy PharmD, University of Texas at Austin, 2017

Patrick J Davis, Professor Eckerd Centennial Professorship in Pharmacy PhD, University of Iowa, 1976

Jennifer Defilippi Faulkner, Adjunct Assistant Professor PharmD, Rutgers the State University of New Jersey New Brunswick Campus, 1997

Elina Delgado, Instructor in Clinical Pharmacy PharmD, University of the Incarnate Word, 2016

John Digiovanni, Professor Coulter R. Sublett Chair in Pharmacy PhD, University of Washington - Seattle, 1978

Monica Do, Instructor in Clinical Pharmacy PharmD, University of Texas at Austin, 2017

Heather H Dobie, Adjunct Assistant Professor PharmD, University of North Carolina at Chapel Hill, 1997

James T Doluisio, Professor Emeritus PhD, Purdue University Main Campus, 1962

Juan M Dominguez, Associate Professor PhD, State University of New York at Buffalo, 2002

Nicole Dominguez, Instructor in Clinical Pharmacy PharmD, University of Texas at Austin, 2017

Erin Eileen Donovan, Associate Professor PhD, University of Illinois at Urbana-Champaign, 2008

Eric C Dougherty, Clinical Assistant Professor PharmD, University of Texas at Austin, 2004

Staci Lynn Dufrene, Adjunct Assistant Professor PharmD, Albany College of Pharmacy of Union University, 2007

Bryson M Duhon, Clinical Assistant Professor PharmD, University of Texas at Austin, 2011

Christine L Duvauchelle, Associate Professor PhD, University of California-Santa Barbara, 1991

Kathryn E Dzintars, Adjunct Assistant Professor PharmD, University of Pittsburgh, Pittsburgh Campus, 2003

Kelly L Echevarria, Clinical Assistant Professor PharmD, Creighton University, 1997 Hannah Ehrenfeld, Instructor in Clinical Pharmacy PharmD, Texas A&M University-Kingsville, 2017

Carlton K Erickson, Professor Pfizer Centennial Professorship in Pharmacy PhD, Purdue University Main Campus, 1965

Richard R Espinosa, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2001

Martha Frances Evans, Instructor in Clinical Pharmacy PharmD, University of Texas at Austin, 2017

Kirk E Evoy, Clinical Assistant Professor PharmD, Purdue University Main Campus, 2013

Lisa E Farnett, Clinical Assistant Professor PharmD, University of Texas Health Science Center at San Antonio, 1988

Lane Burton Farrell, Adjunct Assistant Professor PharmD, University of Kansas Main Campus, 2014

Walter L Fast, Professor PhD, Northwestern University, 1998

Silvia Ferrati PhD, University of Texas Health Science Center at Houston, 2012

Kristin R Fiebelkorn, Adjunct Associate Professor MD, Johns Hopkins University, 1996

Jerry Fineg, Professor Emeritus DVM, Texas A & M University, 1953

Susan M Fischer, Adjunct Professor PhD, University of Wyoming, 1974

Laura K Fonken, Assistant Professor PhD, The Ohio State University Main Campus, 2013

Kentya C Ford, Assistant Professor DPH, University of Texas Health Science Center at Houston, 2005

Cynthia A Foslien, Clinical Assistant Professor PharmD, University of Nebraska Medical Center, 1985

Ana C Franco, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2007

Alan Frazer, Adjunct Professor PhD, Peninsula College, 1969

Shaneka Frazer, Instructor in Clinical Pharmacy PharmD, Temple University, 2017

Christopher R Frei, Associate Professor PharmD, University of Texas at Austin, 2001

Sarah Fry, Instructor in Clinical Pharmacy PharmD, Creighton University, 2017

Conrado D Gamboa, Adjunct Assistant Professor BS, University of Texas at Austin, 1985

Anita A Garcia, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2002

David B Garcia, Adjunct Professor PhD, University of Texas at Austin, 1977

Lindsey Garner, Instructor in Clinical Pharmacy

PharmD, Drake University, 2016

Aida A Garza, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2007

Anyssa S Garza, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2011

Gavino A Garza, Clinical Instructor BS, University of Houston, 1981

Javier R Garza, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2012

Monica Alejandra Garza, Instructor in Clinical Pharmacy PharmD, University of Texas at Austin, 2017

Michael J Gass, Adjunct Assistant Professor PharmD, Midwestern University (Arizona), 2007

Debadyuti Ghosh, Assistant Professor PhD, Rice University, 2006

Diane B Ginsburg, Clinical Professor MS, University of Houston, 1990

Nishi S Goel, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2008

Rueben A Gonzales, Professor Jacques P. Servier Regents Professorship in Pharmacy PhD, University of Texas at Austin, 1983

Carrie E Gonzalez, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2008

F Gonzalez-Lima, Professor George I. Sanchez Centennial Professorship in Liberal Arts PhD, University of Pr Medical Sciences, 1980

Andrea C Gore, Professor Mildred Hajek Vacek and John Roman Vacek Chair in Pharmacology, in Honor of Professor C. C. Albers PhD, University of Wisconsin-Madison, 1990

Stephen J Gore, Adjunct Assistant Professor PharmD, University of Oklahoma Norman Campus, 1996

Roberta L Grant, Adjunct Assistant Professor PhD, University of Texas at Austin, 1995

Belinda K Green, Adjunct Assistant Professor BS, University of Texas at Austin, 1990

Catlin Lee Grisham-Takac, Adjunct Assistant Professor PharmD, Texas Tech University, 2015

Karolina M Grzesiak, Instructor in Clinical Pharmacy PharmD, Purdue University Main Campus, 2017

Veronica I Guerra, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2011

Thomas D Guidry, Clinical Assistant Professor PharmD, University of Texas at Austin, 1982

Nancy M Guillet MSN, University of Texas at Austin, 2011

Tyler Harris Gums, Assistant Professor

PharmD, University of Florida, 2012

Cynthia A Gutierrez, Clinical Assistant Professor PharmD, University of Texas at Austin, 2001

Catherine S Hall, Clinical Assistant Professor PharmD, University of Texas at Austin, 1999

Reed C Hall, Adjunct Assistant Professor PharmD, Midwestern University (Arizona), 2007

Sarah Hallowell, Instructor in Clinical Pharmacy PharmD, University of Texas at Austin, 2017

Elizabeth Oates Hand PharmD, University of Texas at Austin, 2010

Sarah R Hardt, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2012

Kristi L Hargrove, Instructor in Clinical Pharmacy PharmD, University of Washington - Seattle, 2017

R A Harris, Professor M. June and J. Virgil Waggoner Chair in Molecular Biology PhD, University of North Carolina at Chapel Hill, 1973

Sarah Hayes, Instructor in Clinical Pharmacy PharmD, University of Missouri - Kansas City, 2017

Matthew Herpin, Lecturer PhD, University of Texas at Austin, 2015

Lydia A Herrera, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2000

Jon D Herrington, Adjunct Associate Professor PharmD, Saint Louis College of Pharmacy, 1992

Russell A Higgins, Adjunct Assistant Professor MD, University of New Mexico Main Campus, 2002

Lucas Grant Hill, Clinical Assistant Professor PharmD, University of Missouri - Kansas City, 2013

April J Hinds, Adjunct Assistant Professor PharmD, University of Arkansas for Medical Sciences, 2013

Tuyen K Ho, Clinical Assistant Professor PharmD, University of Texas at Austin, 2002

Prudence O Hofmann, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2008

Eugene P Holder, Adjunct Assistant Professor PharmD, University of Texas at Austin, 1994

Collin A Hovinga, Clinical Associate Professor PharmD, Creighton University, 1997

John Huang, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2003

Darrel W Hughes, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2006

Barry L Hull, Clinical Assistant Professor PharmD, University of Southern California, 1983

Pamela Ijeoma, Instructor in Clinical Pharmacy PharmD, Florida Agricultural and Mechanical University, 2016 Susana James, Adjunct Assistant Professor MFA, University of Texas at El Paso, 1998

Theresa J Corona, Clinical Assistant Professor PharmD, University of Texas at Austin, 2001

David G Johnson, Adjunct Associate Professor PhD, University of Texas Southwestern Medical Center at Dallas, 1991

Melissa A Johnson, Adjunct Assistant Professor PharmD, University of Texas at Austin, 1997

Vivian B Johnson, Clinical Assistant Professor PhD, Mercer U Sthn School Phar, 1983

Jason R Jokerst, Adjunct Assistant Professor PharmD, University of Nebraska Medical Center, 2005

David J Jones, Adjunct Professor PharmD, University of Texas Health Science Center at San Antonio, 1974

Sharon A Jung, Clinical Assistant Professor PharmD, University of Texas Health Science Center at San Antonio, 1995

James A Karboski, Clinical Professor PharmD, University of Texas at San Antonio, 1988

Dean L Kellogg, Adjunct Professor PhD, University of Texas Health Science Center at San Antonio, 1989

Priyanka Kelshikar PharmD, University of the Sciences in Philadelphia, 2016

Monte A Kenaston, Adjunct Assistant Professor PhD, University of Texas at Austin, 2010

Sean M Kerwin, Adjunct Associate Professor PhD, University of California-Berkeley, 1989

Dawit Kidane-Mulat, Assistant Professor PhD, Albert Ludwig University Freiburg im Breisgau, 2005

Marcia L Kiger, Clinical Instructor BS, University of Texas at Austin, 1982

Elisabeth Lapp Kincaide, Instructor in Clinical Pharmacy PharmD, University of the Incarnate Word, 2016

Kristina J Klein-Bradham, Clinical Assistant Professor PharmD, University of Texas at Austin, 2004

Jodi M Klocek, Clinical Assistant Professor PharmD, University of Mississippi, 1996

Jim M Koeller, Professor MS, University of Wisconsin-Madison, 1980

John G Kuhn, Professor Emeritus PharmD, University of Texas Health Science Center at San Antonio, 1977

Sydney Kutter, Instructor in Clinical Pharmacy PharmD, Texas Tech University Health Sciences Center, 2017

Phillip H Lai, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2007

Yui-Wing F Lam, Clinical Associate Professor PharmD, University of Minnesota-Twin Cities, 1984

Kenneth A Lawson, Professor Smithkline Centennial Professorship in Pharmacy PhD, University of Texas at Austin, 1992

William Lawson, Professor MD, University of Chicago, 1978

Grace Choi Lee, Assistant Professor PhD, University of Texas at Austin, 2016

Leon Lee III, Clinical Assistant Professor PharmD, University of Kentucky, 1996

Seongmin Lee, Associate Professor PhD, Purdue University Main Campus, 2004

Steven W Leslie, Professor James E. Bauerle Centennial Professorship in Drug Dynamics PhD, Purdue University Main Campus, 1974

Mitchell R Lestico, Clinical Assistant Professor PharmD, University of Wisconsin-Madison, 1992

Melissa R Lewis, Adjunct Assistant Professor PharmD, University of New Mexico Main Campus, 2007

Sara Jean Linedecker, Adjunct Assistant Professor PharmD, Purdue University Main Campus, 2013

Justina Lipscomb, Instructor in Clinical Pharmacy PharmD, Roseman University of Health Sciences, 2012

John H Littlefield, Clinical Assistant Professor PhD, University of Texas at Austin, 1975

Louis C Littlefield, Professor Emeritus PharmD, University of Southern California, 1967

Hung-Wen Liu, Professor George H. Hitchings Regents Chair in Drug Design PhD, Columbia University in the City of New York, 1981

Debra A Lopez, Adjunct Professor PharmD, University of Texas at Austin, 1999

Amanda M Loya, Clinical Associate Professor PharmD, University of Texas at Austin, 2003

Charlotte A Luebbert, Clinical Assistant Professor PharmD, Creighton University, 1995

Liliana Lunares, Adjunct Assistant Professor PharmD, Roseman University of Health Sciences, 2015

Cindy Luu, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2008

Dao Cam Ly, Instructor in Clinical Pharmacy PharmD, University of Houston, 2017

Michael C Macleod, Adjunct Professor PhD, University of Oregon, 1974

Michela Marinelli, Associate Professor PhD, Universite Victor Segalen, Bordeaux II, 1997

Emory S Martin III, Clinical Assistant Professor PharmD, University of California-San Francisco, 1984

Brian Masek, Adjunct Professor PhD, California Institute of Technology, 1987

Pamela R Maxwell, Clinical Assistant Professor

PharmD, University of Texas at Austin, 1994

Theresa A Mays Hutchings, Clinical Assistant Professor PharmD, University of Oklahoma Health Sciences Center, 1994

James W McGinity, Professor Emeritus PhD, University of Iowa, 1972

Megan A McKee, Adjunct Assistant Professor PharmD, University of Arizona, 2008

Nicole L McMaster, Clinical Assistant Professor PharmD, University of Missouri - Kansas City, 2002

Laura Meadow, Instructor in Clinical Pharmacy PharmD, University of Iowa, 2017

Mina Mehvar, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2010

Kelsey Melloy, Instructor in Clinical Pharmacy PharmD, University of North Carolina at Chapel Hill, 2017

George Melnik, Clinical Associate Professor PharmD, University of the Sciences in Philadelphia, 1986

April A Messett, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2007

Robert Messing, Professor MD, Stanford University, 1979

Lisa M Mican, Clinical Assistant Professor PharmD, University of Texas at Austin, 2000

S J Mihic, Associate Professor PhD, University of Toronto, 1992

Arika M Mike, Instructor in Clinical Pharmacy PharmD, University of New Mexico Main Campus, 2016

Edward M Mills, Associate Professor PhD, Purdue University Main Campus, 1997

Harsha Mistry, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2004

Leticia R Moczygemba, Associate Professor PhD, University of Texas at Austin, 2008

Deirdre M Monroe, Clinical Assistant Professor PhD, University of Texas at Austin, 2003

Eugene Moore, Clinical Assistant Professor PharmD, Southeastern University, 1992

Tera D Moore, Clinical Assistant Professor PharmD, University of New Mexico Main Campus, 2003

Troy A Moore, Adjunct Assistant Professor PharmD, University of New Mexico Main Campus, 2003

Rebecca D Moote, Clinical Associate Professor PharmD, University of Texas at Austin, 2007

Vanessa Morales, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2004

Clarissa Moreno, Adjunct Assistant Professor PharmD, Texas Tech University Health Sciences Center, 2003

Richard A Morrisett, Professor

PhD, University of Alabama at Birmingham, 1986

Michael Tanner Moser, Instructor in Clinical Pharmacy PharmD, University of Texas at Austin, 2016

Somshuvra Mukhopadhyay, Assistant Professor PhD, New York Medical College, 2008

Jacquelyn Padilla Navarrete, Clinical Assistant Professor PharmD, University of Texas at Austin, 2009

Jordan D Nelson, Adjunct Assistant Professor PharmD, Drake University, 2009

Jenny S Ngo, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2008

Thanhhao T Ngo, Clinical Assistant Professor PharmD, University of Oklahoma Health Sciences Center, 2003

An Nguyen, Instructor in Clinical Pharmacy PharmD, University of Maryland Baltimore, 2017

Michelle V Nguyen, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2007

Suzanne Novak, Clinical Assistant Professor PhD, University of Texas at Austin, 2005

Dannielle C O'Donnell, Clinical Assistant Professor PharmD, Rutgers the State University of New Jersey Camden Campus, 1993

John T O'Neill, Adjunct Assistant Professor Diploma (High School), , 1951

Lauren Olsen, Instructor in Clinical Pharmacy PharmD, University of North Texas Health Science Center at Fort Worth, 2017

Natalie Osagie, Adjunct Assistant Professor PharmD, Texas Southern University, 2010

Ian W Pace, Adjunct Assistant Professor PharmD, University of Texas at Austin, 1999

Margie E Padilla, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2005

Neil C Pan, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2005

Deepali S Parikh, Adjunct Assistant Professor PharmD, University of Pittsburgh, Pittsburgh Campus, 1999

Sarin Patel, Instructor in Clinical Pharmacy PharmD, University of Houston, 2017

Liza J Paul, Adjunct Assistant Professor PharmD, University of Florida, 2004

Diana Paz, Adjunct Assistant Professor PhD, University of Houston, 2009

Robert Pearlman, Professor Emeritus PhD, University of Michigan-Ann Arbor, 1975

Amanda Marie Pena, Adjoint Assistant Professor PharmD, University of Texas at Austin, 2011

Jodie L Pepin, Clinical Assistant Professor

### PharmD, University of Texas at Austin, 2001

Nicholas A Peppas, Professor Cockrell Family Regents Chair in Engineering #6 ScD, Massachusetts Institute of Technology, 1973

Isaac Perales, Instructor in Clinical Pharmacy PharmD, University of Texas at Austin, 2017

Maria D Person, Adjunct Associate Professor PhD, University of Chicago, 1991

Jay I Peters, Adjunct Professor MD, Baylor College of Medicine, 1977

Patrick S Pevoto, Clinical Assistant Professor MD, University of Texas Medical Branch, 1983

Tracie Phillips, Adjunct Assistant Professor PhD, Texas A & M University, 2006

Cameron Pickard, Instructor in Clinical Pharmacy PharmD, University of Texas at Austin, 2017

Denise Pinal, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2006

Robert N Pinckard, Adjunct Professor PhD, University of Edinburgh, 1967

Igor Ponomarev, Research Assistant Professor (Affiliated) PhD, Oregon Health and Science University, 2002

Nathan D Pope, Clinical Associate Professor PharmD, Rutgers the State University of New Jersey New Brunswick Campus, 2002

Roger P Potyk, Clinical Assistant Professor PhD, University of Texas at Austin, 1989

Gabriel J Quintanilla, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2002

Isidro Ramirez, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2003

Luis Ramirez, Instructor in Clinical Pharmacy PharmD, Texas Tech University Health Sciences Center, 2017

Karen L Rascati, Professor Stewart Turley/Eckerd Corporation Centennial Endowed Professorship in Pharmacy PhD, University of Florida, 1986

Kristin C Reed, Adjunct Assistant Professor PharmD, Auburn University, 2007

Ivan Alexander Reveles, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2010

Kelly Renee Reveles, Assistant Professor PharmD, University of Texas at Austin, 2010

Ann L Richards, Clinical Assistant Professor PharmD, University of Nebraska Medical Center, 1981

John H Richburg, Professor Gustavus and Louise Pfeiffer Professorship in Toxicology PhD, Rutgers the State University of New Jersey Camden Campus, 1993

Jennifer L Ridings-Myhra, Clinical Associate Professor

MEd, Western Governors University Texas, 2016

Jose O Rivera, Clinical Professor PharmD, University of Kentucky, 1979

Rochelle Mendiola Roberts, Lecturer PhD, University of Texas at Austin, 2008

Mauricio L Rodriguez, Adjunct Assistant Professor PharmD, Texas Southern University, 2003

Ralph Rodriguez, Adjunct Assistant Professor MS, University of Texas at San Antonio, 1988

Jordan Rohder, Instructor in Clinical Pharmacy PharmD, Midwestern University (Illinois), 2015

Rebecca A Rottman, Clinical Assistant Professor PharmD, University of Southern California, 2003

John W Rudder, Clinical Instructor BS, University of Texas at Austin, 1983

Veronica C Rudder, Clinical Instructor BD, University of Texas at Austin, 1983

Andres D Ruiz, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2008

Sarah Rumbellow, Instructor in Clinical Pharmacy PharmD, University of Texas at Austin, 2017

Augustus J Rush, Adjunct Professor MD, Columbia University in the City of New York, 1968

Sharon K Rush, Clinical Associate Professor BS, University of Texas at Austin, 1986

Laurajo Ryan, Clinical Associate Professor PharmD, University of Texas at Austin, 2000

Kyllie S Ryan-Hummel, Instructor in Clinical Pharmacy PharmD, University of Texas at Austin, 2016

Paula Rychlik, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2005

Achinto Saha, Research Assistant Professor (Affiliated) PhD, Tokushima Bunri University, 2010

Stephen R Saklad, Clinical Professor PharmD, University of Southern California, 1978

Barbara E Salazar, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2013

Amista L Salcido, Clinical Assistant Professor PharmD, University of Arizona, 1998

Adrian Sandoval Jr, Adjoint Assistant Professor PharmD, Texas A & M University - Kingsville, 2012

Rahul M Sasane, Adjunct Assistant Professor PhD, University of Texas at Austin, 1998

Jennifer K Seltzer, Clinical Associate Professor PharmD, University of Texas Health Science Center at San Antonio, 1984

Thomas C Shank, Clinical Assistant Professor PharmD, University of Tennessee Health Science Center, 1983

William P Sharp, Adjunct Assistant Professor

### BS, University of Texas at Austin, 1976

Marvin D Shepherd, Professor Emeritus PhD, Purdue University Main Campus, 1980

Jennifer Hyun Jung Shin, Instructor in Clinical Pharmacy PharmD, Appalachian College of Pharmacy, 2016

Ashir Shumunov, Instructor in Clinical Pharmacy PharmD, St John's University, 2016

Jeri J Sias, Clinical Associate Professor PharmD, University of Kansas Main Campus, 1998

Leslie R Simien, Adjunct Assistant Professor PharmD, University of California-San Francisco, 2011

Julia Anne Sivinski, Clinical Instructor PhD, University of Texas at Austin, 2002

Stephen Slubar, Instructor in Clinical Pharmacy PharmD, Texas A & M University, 2017

Lucas Smedley, Instructor in Clinical Pharmacy PharmD, Purdue University Main Campus, 2017

Ashley G Smith, Adjunct Assistant Professor PharmD, University of Louisiana at Monroe, 2008

Josiah P Smith, Adjunct Assistant Professor PharmD, Butler University, 2014

Hugh D Smyth, Associate Professor PhD, University of Otago, 2000

Sara L Solis, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2011

Lisa H Song, Adjunct Assistant Professor PharmD, University of North Carolina at Chapel Hill, 2011

Maaya Srinivasa, Adjunct Assistant Professor PharmD, Texas A & M University - Kingsville, 2011

Mitzi A Stansberry, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2010

Casey Stauffer, Instructor in Clinical Pharmacy PharmD, University of Texas at Austin, 2017

Salomon A Stavchansky, Professor Alcon Centennial Professorship in Pharmacy PhD, University of Kentucky, 1974

Daniel J Still, Clinical Assistant Professor PharmD, Creighton University, 1993

Kristina Sucic, Adjunct Assistant Professor PharmD, University of Pittsburgh, Pittsburgh Campus, 2012

Kimberly K Summers, Clinical Assistant Professor PharmD, University of Missouri - Kansas City, 1995

Patricia A Tabor, Clinical Assistant Professor PharmD, University of Texas at Austin, 1983

Sharla K Tajchman, Adjunct Assistant Professor PharmD, Rutgers the State University of New Jersey Camden Campus, 2007

Robert L Talbert Jr, Professor Emeritus

PharmD, University of Kentucky, 1974

Dean G Tang, Adjunct Associate Professor PhD, Wayne State University, 1994

Jodi L Taraba, Adjunct Assistant Professor PharmD, Drake University, 2001

Yasar O Tasnif, Clinical Assistant Professor PharmD, University of Texas at Austin, 2002

Esli Tebedge, Instructor in Clinical Pharmacy PharmD, University of Texas at Austin, 2017

Holli L Temple, Clinical Assistant Professor PharmD, University of Texas at Austin, 1999

Andrew P Ten Eick, Adjunct Associate Professor PharmD, University of Iowa, 1996

Sara Thompson, Instructor in Clinical Pharmacy PharmD, Belmont University, 2016

Kristi A Traugott, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2008

Shana K Trice, Clinical Assistant Professor PharmD, University of Texas at Austin, 1997

Curtis L Triplitt, Clinical Assistant Professor PharmD, University of Texas at Austin, 1995

Rebecca G Twombly, Clinical Assistant Professor PharmD, University of North Carolina at Chapel Hill, 2001

Kenneth J Utz, Adjunct Assistant Professor PharmD, University of Oklahoma Health Sciences Center, 2006

Carla L Van Den Berg, Associate Professor PharmD, University of Texas at Austin, 1991

Karen Marie Vasquez, Professor James T. Doluisio Regents Professorship in Pharmacy PhD, Baylor College of Medicine, 1996

Lindsay Sara Vasquez, Adjunct Assistant Professor PharmD, University of the Incarnate Word, 2012

Susie A Vasquez, Clinical Assistant Professor PharmD, University of Texas at Austin, 1997

John F Villanacci, Adjunct Associate Professor PhD, University of Michigan-Ann Arbor, 1983

Leticia R Villela, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2003

Kristie A Vinklarek, Clinical Assistant Professor PharmD, University of Texas at Austin, 2001

Samantha M Vogel, Instructor in Clinical Pharmacy PharmD, University of Texas at Austin, 2016

Landry Volz, Instructor in Clinical Pharmacy PharmD, University of Oklahoma Health Sciences Center, 2017

Cheryl L Walker, Adjunct Professor PhD, Tex Hlth Sci C Dallas, U, 1984

Janet C Walkow, Clinical Professor PhD, University of Texas at Austin, 1982 Guliang Wang, Research Assistant Professor (Affiliated) PhD, Zhejiang University, 2002

Alan B Watts, Adjunct Assistant Professor PhD, University of Texas at Austin, 2009

Christian P Whitman, Professor Romeo T. Bachand, Jr. Regents Professorship in Pharmacy PhD, University of California-San Francisco, 1984

Nathan P Wiederhold, Adjoint Associate Professor PharmD, University of Texas at Austin, 2000

Richard E Wilcox, Adjunct/Clinical Affiliate PhD, Southern Illinois University Carbondale, 1976

Raeschell Williams, Instructor in Clinical Pharmacy PharmD, University of Kentucky, 2017

Robert O Williams III, Professor Johnson & Johnson Centennial Chair in Pharmacy PhD, University of Texas at Austin, 1986

James P Wilson, Associate Professor PhD, Purdue University Main Campus, 1986

Holly N Winkler, Clinical Instructor PharmD, University of Texas at Austin, 2006

Stewart R Wirebaugh, Clinical Assistant Professor PharmD, University of Illinois at Urbana-Champaign, 1987

Mark Wong, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2004

Billy W Woodward, Clinical Associate Professor BS, University of Texas at Austin, 1963

Consuelo M Worley, Clinical Assistant Professor MS, University of Texas at Austin, 2002

Chanin C Wright, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2001

Robert Wright, Adjunct Assistant Professor PharmD, University of Texas at Austin, 1996

Erin Kristi Yeung, Instructor in Clinical Pharmacy PharmD, University of Texas at Austin, 2016

Veronica S Young, Clinical Associate Professor PharmD, Creighton University, 1993

Stephanie Rose Younts, Adjunct Assistant Professor PharmD, University of Texas at Austin, 2005

Edward M Zastawny, Adjunct Assistant Professor PharmD, University of Texas Health Science Center at San Antonio, 1991

Daria Zavgorodnyaya, Instructor in Clinical Pharmacy PharmD, Long Island University Brooklyn Campus, 2017

Feng Zhang, Assistant Professor PhD, University of Texas at Austin, 1999

Lichao Zhao, Instructor in Clinical Pharmacy PharmD, University of the Incarnate Word, 2016

Kajia Zheng, Instructor in Clinical Pharmacy PharmD, University of Texas at Austin, 2017

# Lyndon B. Johnson School of Public Affairs Faculty

The following faculty list represents those appointed in the 2018 spring semester.

Gordon B Abner, Postdoctoral Fellow PhD, Indiana University at Bloomington, 2017

Abigail Rosemary Ann Aiken, Assistant Professor PhD, University of Texas at Austin, 2014

Jacqueline L Angel, Professor PhD, Rutgers the State University of New Jersey New Brunswick Campus, 1989

Kevin M Bacon, Adjunct Professor MS, London School of Economics and Political Science, 1978

Fred C Beach, Lecturer PhD, University of Texas at Austin, 2010

Richard P Bixler, Research Fellow PhD, Colorado State University, 2014

Terrell Blodgett, Professor Emeritus MS, Syracuse University Main Campus, 1947

Leigh B Boske, Professor Emeritus PhD, University of Pittsburgh, Pittsburgh Campus, 1973

Karl B Brooks, Clinical Professor PhD, University of Kansas Main Campus, 2000

Joshua W Busby, Associate Professor PhD, Georgetown University, 2004

Victoria Maria Defrancesco, Lecturer PhD, Duke University, 2007

Michele Y Deitch, Senior Lecturer JD, Harvard University, 1986

Edwin Dorn, Professor PhD, Yale University, 1978

David J Eaton, Professor Bess Harris Jones Centennial Professorship in Natural Resource Policy Studies PhD, Johns Hopkins University, 1977

Iris Ma Eisenman, Lecturer PhD, University of California-Los Angeles, 2016

Joshua David Eisenman, Assistant Professor MA, Johns Hopkins University, 2002

Brenda W Eivens, Adjunct Assistant Professor MPA, Texas State University-San Marcos, 1995

Gregory W Engle, Lecturer MPAdmin, University of Colorado at Colorado Springs, 1979

Angela M Evans, Clinical Professor MA, University of Wisconsin-Madison, 1971

Raissa Fabregas, Assistant Professor MS, University of Oxford, 2009

Michael G Findley, Professor

PhD, University of Illinois at Urbana-Champaign, 2007

David J Firestein, Clinical Professor MPAff, University of Texas at Austin, 1992

Kenneth Flamm, Professor Dean Rusk Chair in the Lyndon Baines Johnson School of Public Affairs PhD, Massachusetts Institute of Technology, 1979

Lynda E Frost PhD, University of Iowa, 1996

James K Galbraith, Professor Lloyd M. Bentsen, Jr. Chair in Government/Business Relations PhD, Yale University, 1981

Charlee Garden, Clinical Associate Professor MS, Stanford University, 1988

Kenneth L Gladish, Adjunct Professor PhD, University of Virginia, 1985

Michael H Granof, Professor Ernst & Young Distinguished Centennial Professorship of Accounting PhD, University of Michigan-Ann Arbor, 1972

Sherri R Greenberg, Clinical Professor MSc, University of London, 1981

Dagmar S Hamilton, Professor Emeritus JD, American University in Cairo, 1961

Carolyn Heinrich, Research Professor PhD, University of Chicago, 1995

Michael Hole, Research Assistant Professor MD, Stanford University, 2014

Robert L Hutchings, Professor Walt and Elspeth Rostow Chair in National Security PhD, University of Virginia, 1979

Rana S Inboden, Other University Affiliate MA, Stanford University, 2000

William Inboden, Associate Professor PhD, Yale University, 2003

Bobby R Inman, Professor Lyndon B. Johnson Centennial Chair in National Policy BA, University of Texas at Austin, 1950

Bryan D Jones, Professor J. J. "Jake" Pickle Regents Chair in Congressional Studies PhD, University of Texas at Austin, 1970

Peniel E Joseph, Professor Barbara Jordan Chair in Ethics and Political Values PhD, Temple University, 2000

Donald Kettl, Professor PhD, Yale University, 1978

Meeta Kothare PhD, University of Rochester, 1992

Alan J Kuperman, Associate Professor PhD, Massachusetts Institute of Technology, 2002

Erin Lentz, Assistant Professor

MS, Cornell University, 2005

Stephanie Leutert, Research Fellow MA, Yale University, 2016

Michael E Lind, Visiting Professor JD, University of Texas at Austin, 1988

Leigh L Linden, Associate Professor PhD, Massachusetts Institute of Technology, 2004

Martin J Luby, Assistant Professor PhD, Indiana University at Bloomington, 2010

Ji Ma, Assistant Professor MA, Beijing Normal University, 2013

Ray Marshall, Professor Emeritus PhD, University of California-Berkeley, 1954

Mary K McCaston, Adjunct Assistant Professor MA, University of Arizona, 1991

Steven D McKee, Adjunct Assistant Professor MSSW, University of Texas at Austin, 1978

William H McRaven, Professor MA, Naval Postgraduate School, 1991

Montgomery C Meigs PhD, University of Wisconsin-Madison, 1982

Michael P Meyer, Adjunct Assistant Professor MA, University of Texas at Austin, 2008

Jenny Knowles Morrison, Research Fellow PhD, New York University, 2008

Michael W Mosser, Lecturer PhD, University of Wisconsin-Madison, 2002

Angela M Newell, Lecturer PhD, University of Texas at Austin, 2011

Thomas P O'Donnell, Lecturer JD, University of Texas at Austin, 1992

Sheila Marie Olmstead, Professor PhD, Harvard University, 2002

Todd A Olmstead, Associate Professor PhD, Harvard University, 2000

Cynthia Osborne, Associate Professor PhD, Princeton University, 2003

Francie Ostrower, Professor PhD, Yale University, 1991

Rajeev Charles Patel, Research Professor PhD, Cornell University, 2002

Miguel A Pavon, Adjunct Professor MSEnvironE, Instituto Tecnologico y de Estudios Superiores de Monterrey, 1995

Pamela Marie Paxton, Professor Linda K. George and John Wilson Professorship PhD, University of North Carolina at Chapel Hill, 1998

James P Pope, Clinical Professor

MA, Naval Postgraduate School, 1982

Heath J Prince, Lecturer PhD, Brandeis University, 2013

Howard T Prince II, Clinical Professor Loyd Hackler Endowed Chair in Ethical Leadership PhD, University of Texas at Austin, 1975

Varun Rai, Associate Professor PhD, Stanford University, 2008

Lorinc Redei, Lecturer PhD, Central European University, 2013

Pedro Reyes, Professor PhD, University of Wisconsin-Madison, 1985

Victoria E Rodriguez, Professor PhD, University of California-Berkeley, 1987

Jaganath Sankaran, Assistant Professor PhD, University of Maryland College Park, 2012

Jurgen Schmandt, Professor Emeritus PhD, University of Bonn, 1956

Max Sherman, Professor Emeritus JD, University of Texas at Austin, 1960

William H Shute, Lecturer JD, University of Houston, 1987

Stephen Slick, Clinical Professor JD, University of California-Los Angeles, 1983

Evan A Smith, Lecturer MA, Northwestern University, 1988

William G Spelman, Professor PhD, Harvard University, 1988

David W Springer, Professor PhD, Florida State University, 1997

Paul J Stekler, Professor Wofford Denius Chair in Entertainment Studies PhD, Harvard University, 1983

Chandler W Stolp, Associate Professor PhD, Carnegie Mellon University, 1982

Jeremi Suri, Professor Mack Brown Distinguished Chair for Leadership in Global Affairs PhD, Yale University, 2001

John P Thornborrow, Adjunct Assistant Professor MBA, University of Texas at Austin, 1994

Kenneth W Tolo, Professor Emeritus PhD, University of Nebraska - Lincoln, 1968

Philip U Treisman, Professor PhD, University of California-Berkeley, 1985

Paul Von Hippel, Associate Professor PhD, Ohio State U Main Campus, 2010

C Michael Walton, Professor Ernest H. Cockrell Centennial Chair in Engineering PhD, North Carolina State University, 1971

Peter Ward, Professor C. B. Smith, Sr. Centennial Chair in United States-Mexico Relations #1 PhD, University of Liverpool, 1976

David C Warner, Professor Emeritus PhD, Syracuse University Main Campus, 1969

Ruth E Wasem, Clinical Professor PhD, University of Michigan-Ann Arbor, 1990

Andrew Waxman, Assistant Professor PhD, Cornell University, 2016

Catherine Elizabeth Weaver, Associate Professor PhD, University of Wisconsin-Madison, 2003

Robert H Wilson, Professor Mike Hogg Professorship of Urban Policy PhD, University of Pennsylvania, 1979

Patrick P Wong, Associate Professor PhD, University of Wisconsin-Madison, 1988

Sandra E Black, Professor Audre and Bernard Rapoport Centennial Chair in Economics PhD, Harvard University, 1997

Clare Packard Zutz, Lecturer MA, University of Texas at Austin, 2015

# Steve Hicks School of Social Work Faculty

The following faculty list represents those appointed in the 2018 spring semester.

Zaccheus J Ahonle, Lecturer PhD, University of Texas at Austin, 2015

Terrence Allen, Assistant Professor PhD, The University of Alabama, 2003

Robert J Ambrosino, Adjunct Assistant Professor PhD, State University of New York at Albany, 1971

Rosalie Ambrosino, Lecturer PhD, University of Texas at Austin, 1985

Barbara S Anderson, Clinical Professor MSSW, University of Texas at Austin, 1974

Marilyn Armour, Professor PhD, University of Minnesota-Twin Cities, 2000

Joan E Asseff, Clinical Assistant Professor MSSW, University of Texas at Austin, 2006

Johanna Creswell Baez, Lecturer MS, Columbia University in the City of New York, 2006

Margaret M Bassett, Lecturer MS, Northern Illinois University, 1990

Jolynne M Batchelor, Adjunct Assistant Professor PhD, University of Texas at Arlington, 2016

Natalie Deann Beck, Adjunct Assistant Professor

MSSW, University of Texas at Austin, 2009

Mary C Beer, Clinical Assistant Professor MSSW, University of Texas at Austin, 2001

Elisa V Borah, Research Associate Professor (Affiliated) PhD, University of Texas at Austin, 2010

Christopher A Burnett, Lecturer MS, California State University-Sacramento, 2004

Noel B Busch-Armendariz, Professor Endowed President's Professorship PhD, University of South Carolina - Columbia, 2000

Esther Calzada, Associate Professor PhD, University of Florida, 2000

Yessenia Castro, Assistant Professor PhD, Florida State University, 2008

Elaine H Cavazos, Lecturer MSW, Our Lady of the Lake University, 1991

Namkee Choi, Professor Louis and Ann Wolens Centennial Chair in Gerontology PhD, University of California-Berkeley, 1987

Patricia A Cody, Lecturer PhD, University of Texas at Austin, 2007

Deborah Cohen, Research Assistant Professor (Affiliated) PhD, University of Kentucky, 2015

Allan H Cole Jr, Professor PhD, Princeton University, 2001

Fiona Conway, Assistant Professor PhD, Rutgers the State University of New Jersey New Brunswick Campus, 2016

Julia N Cuba, Lecturer MSSW, University of Texas at Austin, 2006

Catherine Cubbin, Professor PhD, Johns Hopkins University, 1998

Susan De Luca, Assistant Professor PhD, Ohio State U Main Campus, 2009

Megan L Delaney, Adjunct Assistant Professor MSSW, University of Texas at Austin, 2010

Diana M Dinitto, Professor Cullen Trust Centennial Professorship in Alcohol Studies and Education PhD, Florida State University, 1980

David L Evans, Lecturer MA, Oakland University, 1976

Monica R Faulkner, Research Associate Professor (Affiliated) PhD, University of Texas at Austin, 2010

Rowena Fong, Professor Ruby Lee Piester Centennial Professorship in Services to Children and Families EdD, Harvard University, 1990

Delinda L Spain, Adjunct Assistant Professor MSSW, University of Texas at Austin, 1999 Cynthia G Franklin, Professor Stiernberg/Spencer Family Professorship in Mental Health PhD, University of Texas at Arlington, 1989

Bethany E Gerlach, Lecturer PhD, University of Texas at Austin, 2011

Dorie J Gilbert, Associate Professor Emeritus PhD, University of Texas at Austin, 1996

Emmett L Gill, Clinical Assistant Professor PhD, University of Maryland Baltimore, 2006

Teresa Granillo, Lecturer PhD, University of Michigan-Ann Arbor, 2011

Roberta R Greene, Professor Emeritus PhD, University of Maryland College Park, 1980

Lauren E Gulbas, Assistant Professor PhD, Southern Methodist University, 2008

Wilbert J Heffernan Jr, Professor Emeritus PhD, University of North Carolina at Chapel Hill, 1964

Mercedes Hernandez, Assistant Professor PhD, University of Southern California, 2014

Margaret Lee Duval Hill, Lecturer MSSW, University of Texas at Austin, 2011

Kristen A Hogan, Lecturer PhD, University of Texas at Austin, 2006

Lori K Holleran, Professor PhD, Arizona State University Main, 2000

Heather Larkin Holloway, Associate Professor PhD, The Catholic University of America, 2006

Catherine Hough, Clinical Assistant Professor MSSW, University of Texas at Austin, 1993

Yuri Jang, Professor PhD, University of South Florida, 2001

Allyson M Jervey, Lecturer MSSW, University of Texas at Austin, 1997

Christine M Johnson, Lecturer MSW, Texas State University-San Marcos, 2003

Barbara L Jones, Professor PhD, State University of New York at Albany, 2004

Dana R Jones, Lecturer MSSW, University of Texas at Austin, 1993

Laura G Jones-Swann, Lecturer EdM, Texas Tech University, 1983

Dina M Kassler, Lecturer PhD, The University of Memphis, 1997

Kendra D Koch, Adjunct Assistant Professor PhD, University of Texas at Austin, 2017

Jane A Kretzschmar, Clinical Professor MSW, University of Michigan-Ann Arbor, 1979

Noel G Landuyt, Lecturer

PhD, University of Texas at Austin, 1999

Braden Latham-Jones, Adjunct Assistant Professor MSSW, University of Michigan-Ann Arbor, 2013

Michael L Lauderdale, Professor Clara Pope Willoughby Centennial Professorship in Criminal Justice PhD, University of Oklahoma Norman Campus, 1967

Laura Lein, Professor Emeritus PhD, Harvard University, 1973

Carol M Lewis, Lecturer PhD, University of Texas at Austin, 1995

Elizabeth Martha Lewis, Adjunct Assistant Professor PhD, University of Texas at Austin, 2017

Tamera B Linseisen, Clinical Associate Professor MSSW, University of Texas at Austin, 1989

Molly A Lopez, Research Associate Professor (Affiliated) PhD, Texas A & M University, 1998

Abena S Mackall, Assistant Professor EdM, Harvard University, 2015

Sandy Magana, Professor Professorship in Autism and Neurodevelopmental Disabilities PhD, Brandeis University, 1999

Octavio N Martinez, Clinical Professor MD, Baylor College of Medicine, 1997

Sarah M McCafferty, Lecturer MSSW, University of Texas at Austin, 2006

John McNeil, Professor Emeritus PhD, University of Southern California, 1964

Ruth G McRoy, Professor Emeritus PhD, University of Texas at Austin, 1981

Alma Leonor Mena, Lecturer MSW, New York University, 2000

Jeffrey D Moe, Adjunct Assistant Professor MSSW, University of Texas at Austin, 2013

Arlene K Montgomery, Lecturer PhD, Smith College, 1999

Elizabeth Mueller, Associate Professor PhD, University of California-Berkeley, 1992

Rosamaria Murillo, Lecturer MSW, Our Lady of the Lake University, 1992

Angela M Nonaka, Assistant Professor PhD, University of California-Los Angeles, 2007

John S Nowicki, Lecturer MSW, University of Texas at Arlington, 1979

Vicki Y Packheiser, Clinical Professor MSW, University of Illinois at Urbana-Champaign, 1980

Yolanda C Padilla, Professor PhD, University of Michigan-Ann Arbor, 1993

Jose Ruben Parra-Cardona, Associate Professor

PhD, Texas Tech University, 2004

Cynthia S Penwell, Lecturer MSSW, University of Texas at Austin, 2010

Farya Phillips, Postdoctoral Fellow PhD, University of Texas at Austin, 2013

Rayven Plaza, Assistant Professor MSW, City University of New York Hunter College, 2014

Elizabeth C Pomeroy, Professor Bert Kruger Smith Centennial Professorship in Social Work PhD, University of Texas at Austin, 1994

Suzanne Laura Potts, Lecturer MSW, San Diego State University, 1998

Diane McDaniel Rhodes, Lecturer MA, The Episcopal Theological Seminary of the Southwest, 2001

Stephanie L Rivaux, Lecturer PhD, University of Texas at Austin, 2009

Michele A Rountree, Associate Professor PhD, Arizona State University Main, 1992

Arthur J Schwab Jr, Professor Emeritus PhD, University of Texas at Austin, 1981

Jaclyn N Sepp, Lecturer MA, Texas State University-San Marcos, 2012

Alba D Sereno, Lecturer MSSW, University of Texas at Austin, 2011

Deborah S Sharp, Lecturer MSSW, University of Texas at Austin, 1998

Guy E Shuttlesworth, Professor Emeritus PhD, University of Pittsburgh, Pittsburgh Campus, 1970

Jennifer Wood Silva, Lecturer MSSW, University of Texas at Austin, 2003

Sarah K Sloan, Clinical Assistant Professor MSSW, University of Texas at Austin, 2003

Douglas R Smith, Adjunct Assistant Professor MSSW, University of Texas at Austin, 2000

Melissa C Smith MD, University of Washington - Seattle, 1988

Robin M Smith, Clinical Assistant Professor MSSW, University of Texas at Austin, 1992

Russell A Smith, Lecturer MSW, University of Houston, 1997

Erin P Spalding, Adjunct Assistant Professor MSSW, University of Texas at Austin, 2007

Debra Lynn Sparks, Clinical Assistant Professor MSW, Texas State University-San Marcos, 2002

Melissa S Stewart, Adjunct Assistant Professor MSSW, Boston University, 2000

Calvin L Streeter, Professor

Meadows Foundation Centennial Professorship in the Quality of Life in the Rural Environment PhD, Washington University in St Louis, 1989

Mitchell Sudolsky, Clinical Professor MSSW, University of Texas at Austin, 1978

Sarah A Swords, Clinical Associate Professor MSW, Simmons College, 1982

Melissa Torres, Lecturer PhD, University of Houston, 2015

Earley R Ullrich, Lecturer MSSW, University of Texas at Austin, 2009

Debra J Umberson, Professor Centennial Commission Professorship in the Liberal Arts #1 PhD, Vanderbilt University, 1985

Carmen R Valdez Chavez, Associate Professor PhD, University of Texas at Austin, 2004

Mary M Velasquez, Professor Centennial Professorship in Leadership for Community, Professional, and Corporate Excellence PhD, University of Texas Health Science Center at Houston, 1997

Shetal S Vohra, Lecturer PhD, University of Houston, 2009

Kirk L Von Sternberg, Associate Professor PhD, University of Texas Health Science Center at Houston, 2005

Tanya M Voss, Clinical Professor MSW, University of Texas at Austin, 1996

Deborah K Webb, Lecturer PhD, University of Texas at Austin, 1994

Shane O Whalley, Lecturer MSSW, University of Texas at Austin, 2003

Valerie A Whiting, Adjunct Assistant Professor MSSW, University of Texas at Austin, 1999

Ahmed Whitt, Assistant Professor PhD, University of North Carolina at Chapel Hill, 2013

Martha S Williams, Professor Emeritus PhD, University of Texas at Austin, 1963

Christine D Winston, Lecturer MSSW, University of Texas at Austin, 1998

Leila G Wood, Research Assistant Professor (Affiliated) PhD, Indiana University at Bloomington, 2014

Luis H Zayas, Professor The Robert Lee Sutherland Chair in Mental Health and Social Policy PhD, Columbia University in the City of New York, 1986

# Index

Α
ABET Criteria, Cockrell School of Engineering 191
Academic Advising19
Academic Advising, John A. and Katherine G. Jackson School of Geosciences
Academic Affairs9
Academic Policies and Procedures, Cockrell School of Engineering 187
Academic Policies and Procedures, College of Education155
Academic Policies and Procedures, College of Fine Arts
Academic Policies and Procedures, College of Liberal Arts
Academic Policies and Procedures, College of Natural Sciences
Academic Policies and Procedures, College of Pharmacy764
Academic Policies and Procedures, John A. and Katherine G. Jackson School of Geosciences
Academic Policies and Procedures, Moody College of Communication 97
Academic Policies and Procedures, Red McCombs School of Business . 54
Academic Policies and Procedures, School of Architecture
Academic Policies and Procedures, School of Nursing749
Academic Policies and Procedures, School of Undergraduate Studies $\ldots$ 22
Academic Policies and Procedures, Steve Hicks School of Social Work 785
Accounting, Bachelor of Business Administration in 58
Accounting, Courses79
Accounting, Courses79
Accounting Suggested Arrangement of Courses59
Accreditation, Bachelor of Science in Nursing752
Accreditation, College of Pharmacy757
Accreditation, Didactic and Coordinated Programs in Dietetics
Accreditation, of the University9
Accreditation, School of Architecture
Accreditation, Steve Hicks School of Social Work782
Actuarial Foundations, Courses730
Admission and Registration, Cockrell School of Engineering 185
Admission and Registration, College of Education155
Admission and Registration, College of Fine Arts 272
Admission and Registration, College of Liberal Arts
Admission and Registration, College of Natural Sciences 640
Admission and Registration, College of Pharmacy761
Admission and Registration, John A. and Katherine G. Jackson School of Geosciences
Admission and Registration, Moody College of Communication97
Admission and Registration, Red McCombs School of Business
Admission and Registration, School of Architecture
Admission and Registration, School of Nursing748

Admission and Registration, School of Undergraduate Studies	22
Admission and Registration, Steve Hicks School of Social Work	784
Admission, BBA/MPA Program	58
Advertising, Bachelor of Science in	99
Advertising, Courses	120
Aerospace Engineering and Engineering Mechanics, Courses	231
Aerospace Engineering, Bachelor of Science in	193
African and African Diaspora Studies, Bachelor of Arts (Plan I)	375
African and African Diaspora Studies, Courses	408
Air Force Science ROTC, Courses	598
American Sign Language, Courses	548
American Studies, Bachelor of Arts (Plan I)	375
American Studies, Courses	419
Américo Paredes Center for Cultural Studies	464
Ancient History and Classicial Civilization, Courses	449
Anthropology, Bachelor of Arts (Plan I)	375
Anthropology, Courses	425
Appendix A: Texas Common Course Numbering System	793
Appendix B: Course Abbreviations	797
Applied Learning and Development, Bachelor of Science in	156
Applied Learning and Development, Courses	162
Applied Movement Science Major, Bachelor of Science in Kinesiolo Health	
Applying for Graduation, Cockrell School of Engineering	190
Applying for Graduation, College of Education	155
Applying for Graduation, College of Fine Arts	277
Applying for Graduation, College of Natural Sciences	649
Applying for Graduation, John A. and Katherine G. Jackson Sc Geosciences	
Applying for Graduation, Red McCombs School of Business	56
Applying for Graduation, Steve Hicks School of Social Work	786
Applying to Professional School	16
Arabic, Courses	560
Architectural Engineering, Bachelor of Science in	195
Architectural Engineering, Courses	244
Architectural Interior Design, Courses	43
Architectural Studies, Bachelor of Science in	40
Architecture, Bachelor of	
Architecture, Courses	45
Architecture, School of	30
Architecture/Bachelor of Arts, Plan II Dual Degree Program, Bachelo	or of . 39
Architecture/Bachelor of Science in Architectural Engineering Dual Program, Bachelor of	
Army ROTC, Courses	598
Art and Art History, Courses	290
Art, Bachelor of Arts (Studio Art)	286

Art History, Bachelor of Arts	)
Arts and Sciences Education, College of Liberal Arts	
Arts and Sciences Education, College of Natural Sciences639	1
Asian American Studies, Bachelor of Arts (Plan I)375	;
Asian American Studies, Courses477	,
Asian Cultures and Languages, Bachelor of Arts (Plan I)	,
Asian Studies, Bachelor of Arts (Plan I)	)
Asian Studies, Courses433	;
Astronomy, Bachelor of Arts (Plan I)652	
Astronomy, Bachelor of Science and Arts in655	,
Astronomy, Bachelor of Science in657	,
Astronomy, Courses	)
Athletic Training, Bachelor of Science in158	;
Attendance, Cockrell School of Engineering 187	,
Attendance, College of Pharmacy766	)

### В

Bachelor of Architecture
Bachelor of Architecture/Bachelor of Arts, Plan II Dual Degree Program . 39
Bachelor of Architecture/Bachelor of Science in Architectural Engineering Dual Degree Program37
Bachelor of Arts
Bachelor of Arts in Geological Sciences
Bachelor of Arts in Music288
Bachelor of Arts in Theatre and Dance
Bachelor of Arts, Plan I, College of Liberal Arts
Bachelor of Arts, Plan I, College of Natural Sciences
Bachelor of Arts, Plan II
Bachelor of Business Administration 57
Bachelor of Fine Arts
Bachelor of Journalism 104
Bachelor of Music
Bachelor of Science and Arts
Bachelor of Science in Advertising99
Bachelor of Science in Aerospace Engineering 193
Bachelor of Science in Architectural Engineering195
Bachelor of Science in Architectural Studies40
Bachelor of Science in Arts and Entertainment Technologies
Bachelor of Science in Astronomy 657
Bachelor of Science in Athletic Training 158
Bachelor of Science in Biochemistry658
Bachelor of Science in Biology
Bachelor of Science in Biomedical Engineering198
Bachelor of Science in Chemical Engineering203
Bachelor of Science in Chemistry662
Bachelor of Science in Civil Engineering

Bachelor of Science in Communication and Leadership100
Bachelor of Science in Communication Sciences and Disorders101
Bachelor of Science in Communication Studies102
Bachelor of Science in Computational Engineering209
Bachelor of Science in Computer Science
Bachelor of Science in Electrical Engineering211
Bachelor of Science in Environmental Engineering
Bachelor of Science in Environmental Science, College of Liberal Arts387
Bachelor of Science in Environmental Science, College of Natural Sciences 
Bachelor of Science in Environmental Science, John A. and Katherine G. Jackson School of Geosciences
Bachelor of Science in Geological Sciences
Bachelor of Science in Geosystems Engineering and Hydrogeology, John A. and Katherine G. Jackson School of Geosciences
Bachelor of Science in Geosystems Engineering and Hydrogeology, Cockrell School of Engineering219
Bachelor of Science in Human Development and Family Sciences 670
Bachelor of Science in Interior Design
Bachelor of Science in Kinesiology and Health159
Bachelor of Science in Mathematics672
Bachelor of Science in Mechanical Engineering
Bachelor of Science in Medical Laboratory Science
Bachelor of Science in Neuroscience675
Bachelor of Science in Nursing752
Bachelor of Science in Nutrition676
Bachelor of Science in Petroleum Engineering
Bachelor of Science in Physics679
Bachelor of Science in Psychology
Bachelor of Science in Public Health
Bachelor of Science in Public Relations105
Bachelor of Science in Radio-Television-Film
Bachelor of Science in Textiles and Apparel
Bachelor of Social Work
Basic Education Requirements, School of Undergraduate Studies 22
Bassoon, Courses
BBA Degree Requirements, Red McCombs School of Business
Bengali, Courses
Biochemistry, Bachelor of Science and Arts in
Biochemistry, Bachelor of Science in
Biochemistry, Courses
Biology, Bachelor of Science and Arts655
Biology, Bachelor of Science in
Biology, Courses
Biomedical Engineering, Bachelor of Science in
Biomedical Engineering, Courses

Board of Regents7
Bridges to the Future Credential Program222
Bridging Disciplines, Courses25
Bridging Disciplines Programs, School of Undergraduate Studies
Business Administration, Bachelor of 57
Business Administration, Courses77
Business, Government and Society, Courses
Business Honors Program, Bachelor of Business Administration in 59
Business Honors Program Suggested Arrangement of Courses 60

## С

Career Services, Cockrell School of Engineering	. 184
Career Services, College of Education	154
Career Services, College of Fine Arts	. 272
Career Services, College of Liberal Arts	. 361
Career Services, College of Pharmacy	759
Career Services, Jackson School of Geosciences	. 334
Career Services, McCombs School of Business	52
Career Services, Moody College of Communication	96
Career Services, School of Undergraduate Studies	28
Career Services, Steve Hicks School of Social Work	. 783
Catalog Choice	21
Center for Asian American Studies	477
Center for European Studies	480
Center for Russian, East European, and Eurasian Studies	. 600
Center for Women's and Gender Studies	626
Chemical Engineering, Bachelor of Science in	203
Chemical Engineering, Courses	241
Chemistry and Biochemistry, Courses	705
Chemistry, Bachelor of Arts (Plan I)	652
Chemistry, Bachelor of Science and Arts	. 655
Chemistry, Bachelor of Science in	. 662
Chinese, Courses	440
Civil, Architectural, and Environmental Engineering, Courses	. 244
Civil Engineering, Bachelor of Science in	. 206
Clarinet, Courses	. 323
Classical Languages, Bachelor of Arts (Plan I)	376
Classical Studies, Bachelor of Arts (Plan I)	377
Classics, Courses	448
Cockrell School of Engineering	. 182
Cognitive Science, Courses	. 456
College of Education	154
College of Fine Arts	. 271
College of Liberal Arts	. 361
College of Natural Sciences	639

College of Pharmacy757
Communication and Leadership119
Communication, Courses116
Communication Sciences and Disorders, Bachelor of Science in101
Communication Sciences and Disorders, Courses127
Communication Studies, Bachelor of Science in102
Communication Studies, Courses129
Community and Regional Planning, Courses
Comparative Literature, Courses456
Compliance Requirements for Clinical Courses, School of Nursing750
Composition Major
Computer Science, Bachelor of Arts (Plan I)652
Computer Science, Bachelor of Science and Arts in 656
Computer Science, Bachelor of Science in
Computer Science, Courses
Cooperative Engineering Education Program
Core Curriculum
Core Texts and Ideas, Courses
Course Abbreviations
Courses, Cockrell School of Engineering
Courses, College of Education
Courses, College of Fine Arts
Courses, College of Liberal Arts404
Courses, College of Natural Sciences694
Courses, College of Pharmacy
Courses, John A and Katherine G. Jackson School of Geosciences 348
Courses, Moody College of Communication
Courses, Red McCombs School of Business
Courses, School of Architecture
Courses, School of Information
Courses, School of Nursing753
Courses, School of Undergraduate Studies
Courses, Steve Hicks School of Social Work
Coursework, Graduate School and the School of Law
Cultural Studies, Courses
Curriculum and Instruction, Courses
Czech, Courses
D

Dance, Bachelor of Fine Arts	. 282
Danish, Courses	500
Degree Audit, Cockrell School of Engineering	.189
Degree Audit, College of Fine Arts	.276
Degree Audit, College of Liberal Arts	.370
Degree Audit, Jackson School of Geosciences	.336

Degree Audit, Moody College of Communication	98
Degree Audit, Red McCombs School of Business	56
Degree Audit, School of Architecture	34
Degree Audit, School of Nursing	751
Degree Programs	10
Degrees and Programs, Cockrell School of Engineering	190
Degrees and Programs, College of Education	155
Degrees and Programs, College of Fine Arts	277
Degrees and Programs, College of Liberal Arts	370
Degrees and Programs, College of Natural Sciences	649
Degrees and Programs, College of Pharmacy	766
Degrees and Programs, John A. and Katherine G. Jackson Sch Geosciences	
Degrees and Programs, Moody College of Communication	98
Degrees and Programs, Red McCombs School of Business	56
Degrees and Programs, School of Architecture	35
Degrees and Programs, School of Nursing	752
Degrees and Programs, Steve Hicks School of Social Work	786
Degrees Offered at the University	10
Department of Advertising	120
Department of Aerospace Engineering and Engineering Mechanics	231
Department of African and African Diaspora Studies	408
Department of Air Force Science	598
Department of American Studies	419
Department of Anthropology	425
Department of Art and Art History	290
Department of Asian Studies	433
Department of Astronomy	696
Department of Biomedical Engineering	236
Department of Business, Government and Society	84
Department of Chemical Engineering	241
Department of Chemistry	705
Department of Civil, Architectural, and Environmental Engineering	244
Department of Classics	448
Department of Communication Sciences and Disorders	127
Department of Communication Studies	129
Department of Computer Science	710
Department of Curriculum and Instruction	163
Department of Economics	464
Department of Educational Psychology	166
Department of Electrical and Computer Engineering	249
Department of English	467
Department of Finance	81
Department of French and Italian	487
Department of Geography and the Environment	491

Department of Germanic Studies	500
Department of Government	507
Department of History	517
Department of Information, Risk, and Operations Management	86
Department of Kinesiology and Health Education	168
Department of Linguistics	548
Department of Management	90
Department of Marine Science	727
Department of Marketing	92
Department of Mathematics	730
Department of Mechanical Engineering	257
Department of Mexican American and Latina/o Studies	551
Department of Middle Eastern Studies	560
Department of Military Science	598
Department of Molecular Biosciences	736
Department of Naval Science	599
Department of Philosophy	570
Department of Physics	739
Department of Psychology	575
Department of Radio-Television-Film	144
Department of Religious Studies	585
Department of Rhetoric and Writing	595
Department of Slavic and Eurasian Studies	604
Department of Sociology	608
Department of Spanish and Portuguese	616
Department of Theatre and Dance	301
Design, Bachelor of Fine Arts	281
Design, Courses	328
Developmental Studies, Courses	26
Directory of Offices	7
Division of Statistics and Data Sciences	743
Doctor of Pharmacy	766
Double Bass, Courses	323
Drum Set, Courses	323
Dutch, Courses	500
_	

### Ε

Economics, Bachelor of Arts (Plan I)	.377
Economics, Courses	.464
Education, College of	154
Educational Psychology, Courses	166
Electrical and Computer Engineering, Courses	249
Electrical Engineering, Bachelor of Science in	.211
Engineering Mechanics, Courses	236
Engineering Studies, Courses	229

English, Bachelor of Arts (Plan I)
English, Courses467
Ensemble, Courses
Environmental Science, Bachelor of Science in (Biological Sciences)668
Environmental Science, Bachelor of Science in (Geographical Sciences) 
Environmental Science, Bachelor of Science in (Geological Sciences)340
Environmental Science, Courses
Equal Educational Opportunity Statement9
Ethnic Studies, Bachelor of Arts (Plan I)
Euphonium, Courses
European Studies, Bachelor of Arts (Plan I)
European Studies, Courses 480
Exercise Science Major, Bachelor of Science in Kinesiology and Health 160
_

### F

Facilities, Cockrell School of Engineering 182
Facilities, College of Education154
Facilities, College of Fine Arts 271
Facilities, College of Pharmacy758
Facilities, Moody College of Communication96
Facilities, Red McCombs School of Business51
Facilities, School of Architecture
Facilities, School of Nursing747
Facilities, Steve Hicks School of Social Work783
Faculty, Cockrell School of Engineering 823
Faculty, College of Education
Faculty, College of Fine Arts
Faculty, College of Liberal Arts
Faculty, College of Natural Sciences
Faculty, College of Pharmacy909
Faculty, John A. and Katherine G. Jackson School of Geosciences 846
Faculty, Lyndon B. Johnson School of Public Affairs
Faculty, Moody College of Communication810
Faculty, Red McCombs School of Business802
Faculty, School of Architecture
Faculty, School of Information
Faculty, School of Nursing 907
Faculty, Steve Hicks School of Social Work
Faculty, Steve Hicks School of Social Work
Finance, Bachelor of Business Administration in61
Finance, Bachelor of Business Administration in
Finance, Bachelor of Business Administration in
Finance, Bachelor of Business Administration in

Financial Assistance, College of Natural Sciences	639
Financial Assistance, College of Pharmacy	759
Financial Assistance, John A. and Katherine G. Jackson Geosciences	
Financial Assistance, Moody College of Communication	
Financial Assistance, Red McCombs School of Business	51
Financial Assistance, School of Architecture	31
Financial Assistance, School of Nursing	747
Financial Assistance, Steve Hicks School of Social Work	783
Fine Arts, Bachelor of	
Fine Arts, College of	271
Fine Arts, Courses	
First-Year Interest Groups, School of Undergraduate Studies	
Flag Requirements	23
Flute, Courses	
French and Italian, Courses	
French, Bachelor of Arts (Plan I)	
French Civilization, Courses	489
French Horn, Courses	323

## G

-
General Engineering, Courses
General Geology Option, Bachelor of Science in Geological Sciences 342
General Information
General Information, Cockrell School of Engineering 182
General Information, College of Education154
General Information, College of Fine Arts
General Information, College of Liberal Arts
General Information, College of Natural Sciences
General Information, College of Pharmacy757
General Information, John A. and Katherine G. Jackson School of Geosciences
General Information, Lyndon B. Johnson School of Public Affairs 781
General Information, Moody College of Communication96
General Information, Red McCombs School of Business51
General Information, School of Architecture
General Information, School of Nursing747
General Information, School of Undergraduate Studies
General Information, Steve Hicks School of Social Work782
General Requirements, College of Education155
General Requirements, Graduation20
General Requirements, of the University
Geography and the Environment, Courses
Geography, Bachelor of Arts (Plan I)
Geological Sciences, Bachelor of Arts in
Geological Sciences, Bachelor of Science in

Geological Sciences, Courses
Geophsyics Option, Bachelor of Science in Geological Sciences
Geosystems Engineering and Hydrogeology, Bachelor of Science in Geological Sciences
German
German, Courses
German, Scandinavian, and Dutch Studies, Bachelor of Arts (Plan I) 379
German, Scandinavian, and Dutch Studies, Courses
Germanic Studies, Courses
Government, Bachelor of Arts (Plan I)
Government, Courses
Graduate Work, Undergraduate Credit18
Graduation Application Form, School of Nursing751
Graduation Ceremony20
Graduation, Cockrell School of Engineering189
Graduation, College of Education155
Graduation, College of Fine Arts
Graduation, College of Liberal Arts
Graduation, College of Natural Sciences648
Graduation, College of Pharmacy766
Graduation, John A. and Katherine G. Jackson School of Geosciences . 336
Graduation, Moody College of Communication
Graduation, Red McCombs School of Business 55
Graduation, School of Architecture
Graduation, School of Nursing751
Graduation, Steve Hicks School of Social Work786
Graduation under a Particular Catalog21
Greek, Courses
Guitar, Courses
н

Harp Performance Major
Harpsichord, Courses
Health and Society
Health and Society Program516
Health Education, Courses168
Hebrew, Courses562
Hildebrand Department of Petroleum and Geosystems Engineering 266
Hindi, Courses
History, Bachelor of Arts (Plan I)
History, Cockrell School of Engineering182
History, College of Pharmacy757
History, Courses
History, Red McCombs School of Business51
History, School of Architecture

History, School of Nursing7	'47
History, Steve Hicks School of Social Work7	'82
Honor Code	6
Honors	.19
Honors, Cockrell School of Engineering 1	88
Honors, College of Education1	55
Honors, College of Fine Arts 2	274
Honors, College of Liberal Arts 3	363
Honors, College of Natural Sciences	545
Honors, College of Pharmacy7	'66
Honors, John A. and Katherine G. Jackson School of Geosciences 3	36
Honors, Moody College of Communication	.98
Honors, Red McCombs School of Business	.55
Honors, School of Architecture	34
Honors, School of Nursing7	'50
Honors, Steve Hicks School of Social Work7	'85
Human Development and Family Sciences, Bachelor of Science and A in	
Human Development and Family Sciences, Courses	'16
Human Dimensions of Organizations3	380
Human Dimensions Of Organizations5	533
Human Ecology, Bachelor of Science and Arts in6	556
Human Ecology, Courses7	'16
Humanities, Bachelor of Arts (Plan I)	380
Humanities, Courses5	534
Humanities Program5	534
Hydrogeology Option, Bachelor of Science in Geological Sciences3	344

### L

Iberian and Latin American Languages and Cultures, Bachelor of I)	
Information, Risk, and Operations Management, Courses	86
Information, School of	
Information Studies, Courses	359
Interdisciplinary Opportunities	13
Interior Design, Bachelor of Science in	35
International Business, Bachelor of Business Administration in	62
International Business, Courses	92
International Business Suggested Arrangement of Courses	63
International Relations and Global Studies, Bachelor of Arts (Pla	in I)381
International Relations and Global Studies, Courses	535
Introduction	6
Islamic Studies, Bachelor of Arts (Plan I)	
Islamic Studies, Courses	563
Italian, Bachelor of Arts (Plan I)	
Italian Civilization, Courses	491

Italian, Courses	
------------------	--

### J

Japanese, Courses	443
Jazz Major	284
Jewish Studies, Bachelor of Arts (Plan I)	382
Jewish Studies, Courses	535
John A. and Katherine G. Jackson School of Geosciences	333
Journalism, Bachelor of	104
Journalism, Courses	135

# Κ

Kinesiology and Health, Bachelor of Science in	159
Kinesiology and Health Education, Courses	168
Korean, Courses	444

## L

Latin American Studies, Bachelor of Arts (Plan I)
Latin American Studies, Courses539
Latin, Courses455
Leadership Development Program, Red McCombs School of Business 53
Legal Environment of Business, Courses85
Legal Requirements for Professional Practice, College of Pharmacy 761
Liberal Arts, College of
Liberal Arts, Courses404
Liberal Arts Honors, Courses 406
Liberal Education of Engineers, Cockrell School of Engineering191
Licensure as a Professional Nurse, School of Nursing751
Linguistics, Bachelor of Arts (Plan I)
Linguistics, Courses
Lyndon B. Johnson School of Public Affairs781

## Μ

Management, Bachelor of Business Administration in
Management, Courses
Management Information Systems, Bachelor of Business Administration in64
Management Information Systems, Courses
Management Information Systems Suggested Arrangement of Courses 64
Management Suggested Arrangement of Courses64
Marine Science, Courses727
Marketing, Bachelor of Business Administration in65
Marketing, Courses
Marketing Suggested Arrangement of Courses65
Mathematics, Bachelor of Arts (Plan I)653
Mathematics, Bachelor of Science and Arts656
Mathematics, Bachelor of Science in672

Mathematics, Courses	.730
Mechanical Engineering, Bachelor of Science in	. 220
Mechanical Engineering, Courses	.257
Medical Clearance Requirements, College of Pharmacy	.763
Medical Clearance Requirements, School of Nursing	750
Medical Laboratory Science, Bachelor of Science in	.674
Merchandising and Consumer Sciences Option, Bachelor of Science Textiles and Apparel	e in . 683
Mexican American and Latina/o Studies, Bachelor of Arts (Plan I)	. 382
Mexican American Studies, Courses	. 551
Middle Eastern Languages and Cultures, Bachelor of Arts (Plan I)	.382
Middle Eastern Studies, Bachelor of Arts (Plan I)	.382
Middle Eastern Studies, Courses	. 554
Military Science, Courses	. 598
Minor and Certificate Programs, Cockrell School of Engineering	.225
Minor and Certificate Programs, College of Education	.161
Minor and Certificate Programs, College of Fine Arts	289
Minor and Certificate Programs, College of Liberal Arts	391
Minor and Certificate Programs, College of Natural Sciences	685
Minor and Certificate Programs, John A. and Katherine G. Jackson Sc of Geosciences	
Minor and Certificate Programs, Moody College of Communication	107
Minor and Certificate Programs, Red McCombs School of Business	67
Minor and Certificate Programs, School of Architecture	41
Minor and Certificate Programs, School of Information	.358
Minor and Certificate Programs, School of Undergraduate Studies	24
Minor and Certificate Programs, Steve Hicks School of Social Work	. 789
Minor and Certificate Programs, The University	13
Mission, Cockrell School of Engineering	. 182
Mission, College of Education	.154
Mission, College of Fine Arts	. 271
Mission, College of Pharmacy	.757
Mission, John A. and Katherine G. Jackson School of Geosciences	333
Mission, Moody College of Communication	96
Mission of the University	6
Mission, Red McCombs School of Business	51
Mission, School of Architecture	30
Mission, School of Nursing	. 747
Mission, School of Undergraduate Studies	22
Mission, Steve Hicks School of Social Work	.782
Moody College of Communication	96
Multiple Degrees	20
Music, Bachelor of	. 283
Music, Bachelor of Arts in	. 288
Music Literature, Courses	.312

Music Performance, Courses	
Music Studies, Courses	
Music Studies Major	
Music Theory	

### Ν

Natural Sciences, College of
Natural Sciences, Courses
Naval Science, Courses 599
Neuroscience, Bachelor of Science and Arts in
Neuroscience, Bachelor of Science in
Neuroscience, Courses737
Norwegian, Courses
Nursing, Bachelor of Science in752
Nursing, Courses753
Nursing, School of747
Nutrition, Bachelor of Science and Arts
Nutrition, Bachelor of Science in
Nutrition, Courses

## 0

Oboe, Courses
Officers of the Administration6
Operations Management, Courses87
Option I: General Geology
Option II: Geophysics
Option III: Hydrogeology
Option V: Teaching
Orchestral Instrument Performance Major 284
Organ, Courses
Organ or Harpsichord Performance Major 283
Organization of the University9

## Ρ

Pashto, Courses
Percussion, Courses
Persian, Courses
Petroleum and Geosystems Engineering, Courses
Petroleum Engineering, Bachelor of Science in 223
Pharmacy, College of757
Pharmacy, Courses768
Pharmacy Preprofessional and Professional Coursework
Philosophy, Bachelor of Arts (Plan I)
Philosophy, Courses570
Physical Education, Courses177
Physical Science, Courses739
Physics, Bachelor of Arts (Plan I)653

Physics, Bachelor of Science and Arts in	657
Physics, Bachelor of Science in	679
Physics, Courses	739
Piano, Courses	323
Piano Performance Major	283
Plan II Honors Program, Courses	574
Polish, Courses	605
Portuguese Civilization, Courses	616
Portuguese, Courses	617
Preparation for Health Professions	16
Preparation for Law	16
Preparation for Teacher Certification	16
PROCEED (Project-Centered Education)	221
Professional Liability Insurance, College of Pharmacy	763
Professional Liability Insurance, Steve Hicks School of Social Work	784
Programs and Centers, School of Undergraduate Studies	28
Psychology, Bachelor of Arts (Plan I)	383
Psychology, Bachelor of Science in	390
Psychology, Courses	575
Public Affairs, Courses	781
Public Health, Bachelor of Science in	682
Public Health, Courses	722
Public Relations, Bachelor of Science in	105
Public Relations, Courses	120

## R

Radio-Television-Film, Bachelor of Science in 106
Radio-Television-Film, Courses
Real Estate, Courses83
Recorder, Courses
Red McCombs School of Business 5
Registration as a Professional Engineer, Cockrell School of Engineering
Registration, Cockrell School of Engineering
Registration, College of Education155
Registration, College of Fine Arts
Registration, College of Liberal Arts
Registration, College of Pharmacy763
Registration, John A. and Katherine G. Jackson School of Geosciences 33
Registration, Moody College of Communication97
Registration, Red McCombs School of Business 54
Registration, School of Nursing749
Registration, Steve Hicks School of Social Work785
Religious Studies, Bachelor of Arts (Plan I)
Religious Studies, Courses
Repetition of a Course, Cockrell School of Engineering

# S

Sanger Learning Center, School of Undergraduate Studies	28
Sanskrit, Courses	446
Sarah and Ernest Butler School of Music, Courses	
Saxophone, Courses	323
School of Architecture	
School of Design and Creative Technologies, Courses	324
School of Human Ecology, Courses	716
School of Information	
School of Journalism, Courses	135
School of Nursing	747
School of Nursing Honor Code, School of Nursing	749
School of Undergraduate Studies	22
Schusterman Center for Jewish Studies	
Science and Technology Management, Bachelor of Administration in	
Science and Technology Management Suggested Arrangement of	
Science, Courses	179
Science, Technology, and Society, Courses	432
Serbian/Croatian, Courses	607
Signature Courses, School of Undergraduate Studies	23
Simultaneous Majors	13
Slavic and Eurasian Studies, Courses	604
Social Science, Courses	574
Social Work, Bachelor of	
Social Work, Courses	
Sociology, Bachelor of Arts (Plan I)	
Sociology, Courses	
Spanish and Portuguese, Courses	616
Special Education, Courses	
Standards of Ethical Conduct, College of Pharmacy	765
Standards of Nursing Performance and Progress, School of Nurs	sing 749
Statement on Equal Educational Opportunity	9

Statistics and Data Sciences, Courses	743
Statistics, Courses	89
Steve Hicks School of Social Work	782
Student Health Insurance, College of Pharmacy	764
Student Organizations and Programs, Cockrell School of Engineering	184
Student Organizations, College of Education	154
Student Organizations, College of Fine Arts	272
Student Organizations, Moody College of Communication	97
Student Organizations, Red McCombs School of Business	52
Student Organizations, School of Architecture	32
Student Organizations, School of Nursing	748
Student Programs, College of Natural Sciences	639
Student Responsibility	19
Student Services, Cockrell School of Engineering	183
Student Services, College of Education	154
Student Services, College of Fine Arts	272
Student Services, College of Liberal Arts	361
Student Services, College of Natural Sciences	639
Student Services, College of Pharmacy	759
Student Services for the University	9
Student Services, John A. and Katherine G. Jackson School Geosciences	
Student Services, Moody College of Communication	96
Student Services, Red McCombs School of Business	51
Student Services, School of Architecture	
Student Services, Steve Hicks School of Social Work	
Studio Art Major	
Study Abroad and Internship Opportunities, School of Architecture	
Study Abroad, Cockrell School of Engineering	185
Study Abroad, College of Fine Arts	
Study Abroad, College of Natural Sciences	
Study Abroad, Red McCombs School of Business	
Stuidio Art, Courses	
Suggested Arrangement of Courses, Bachelor of Architecture	37
Suggested Arrangement of Courses, Bachelor of Architecture/Bache Arts, Plan II Dual Degree Program	
Suggested Arrangement of Courses, Bachelor of Architecture/Bache Science in Architectural Engineering Dual Degree Program	lor of
Suggested Arrangement of Courses, Bachelor of Science in Aeros Engineering	space
Suggested Arrangement of Courses, Bachelor of Science in Architec Engineering	
Suggested Arrangement of Courses, Bachelor of Science in Architec Studies	
Suggested Arrangement of Courses, Bachelor of Science in Biome Engineering	
Suggested Arrangement of Courses, Bachelor of Science in Cher Engineering	mical

Suggested Arrangement of Courses, Bachelor of Science in Civil Engineering
Suggested Arrangement of Courses, Bachelor of Science in Computational Engineering
Suggested Arrangement of Courses, Bachelor of Science in Computer Engineering
Suggested Arrangement of Courses, Bachelor of Science in Electrical Engineering
Suggested Arrangement of Courses, Bachelor of Science in Environmental Engineering
Suggested Arrangement of Courses, Bachelor of Science in Geosystems Engineering and Hydrogeology
Suggested Arrangement of Courses, Bachelor of Science in Interior Design
Suggested Arrangement of Courses, Bachelor of Science in Mechanical Engineering
Suggested Arrangement of Courses, Bachelor of Science in Petroleum Engineering
Supply Chain Management
Supply Chain Management, Bachelor of Business Administration in 66
Supply Chain Management Suggested Arrangement of Courses
Sustainability Studies
Swahili, Courses
Swedish, Courses
-

### Т

Tamil, Courses
Teaching Option, Bachelor of Science in Geological Sciences
Technical Area Options, Cockrell School of Engineering190
Telugu, Courses
Texas Common Course Numbering System
Texas Success Initiative, School of Undergraduate Studies
Textiles and Apparel, Bachelor of Science in
Textiles and Apparel, Courses724
Theatre and Dance, Bachelor of Arts in
Theatre and Dance, Courses
Theatre Studies Major
Thomas Jefferson Center for the Study of Core Texts and Ideas, Courses 
Trombone, Courses
Trumpet, Courses
Tuba, Courses
Turkish, Courses
Tutorial, Courses
U
Undergraduate Degrees9

Undergraduate Degrees	9
Undergraduate Research, Office of	.29
Undergraduate Research, School of Undergraduate Studies	.29
Undergraduate Studies, Courses	.27

Undergraduate Studies, School of			
University of Texas at Austin, Officers of Administration6			
University of Texas System, the9			
University, the9			
Urban Studies, Bachelor of Arts (Plan I)			
Urban Studies, Courses			
Urdu, Courses			
UTeach-Fine Arts Teacher Certification279			
UTeach-Liberal Arts, College of Liberal Arts			
UTeach-Liberal Arts, Courses			
UTeach-Natural Sciences, Courses746			

### V

### W

Women's and Gender Studies,	Bachelor	of Arts (Plan I)	
Women's and Gender Studies,	Courses		626

## Υ

Yiddish, Courses	
Yoruba, Courses	