PHM - Pharmacy PharmD

Pharmacy PharmD: PHM

Lower-Division 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.

Upper-Division Courses

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.

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.

Explore any basic area of the pharmaceutical and clinical 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. Prerequisite: Prerequisites vary with the topic.

Graduate Courses

Professional Courses

PHM 180. Pharmacotherapeutics of Vaccine-Preventable Diseases.
Restricted to students in the College of Pharmacy. Examine the administration of safe and accurate immunization services to patients that will promote disease prevention and public health. Explore the national immunization standards through the Centers for Disease Control and Prevention. One lecture hour a week for one semester. Offered on the letter-grade basis only.

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: Second-professional-year standing in pharmacy.

PHM 280J. Theory and Practice of Teaching in Pharmacy Education.
Explore teaching concepts, processes, and theories related to pharmacy education. Combine theory and practice to create a teaching portfolio. Two lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 186E or 286E or consent of instructor.

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),
and apply those concepts to create an assessment portfolio. Two lecture

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 180Q. Pharmaceutical Industry Fellowship Preparation.
Explore pharmaceutical industry fellowships and review skills needed for competitive fellowship applications. One lecture hour per week for one semester. Pharmacy PharmD 180Q and 182R (topic: Pharma Industry Flwshp Prep) may not both count. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 182T or consent of instructor.

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 180S. Tools to Enhance Academic Success.
Restricted to students in the College of Pharmacy. Investigate tools and resources available for enhancing academic success in the professional pharmacy curriculum. One lecture hour a week for one semester Pharmacy PharmD 180S and 182R (Topic: Enhancing Academic Success) may not both be counted. Offered on the letter-grade basis only.

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: Third-professional-year standing in Pharmacy.

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, and 483.

PHM 281J. Theory and Practice of Assessment in Pharmacy Education.
Explore current assessment concepts related to pharmacy education and apply those concepts to create an assessment portfolio. Two lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 280J or consent of instructor.

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 283L (or 281L or Pharmacy 244C).

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 181Q. Introduction to Pharmaceutical Industry.
Explore potential careers for pharmacists in the pharmaceutical industry. One lecture hour a week for one semester Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 182T or consent of instructor.

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 letter-grade 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 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 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 181V. Pharmacy Practice Lab I.
Restricted to students in the College of Pharmacy. Navigate the pharmacists' patient care process in preparation for Introductory and Advanced Pharmacy Practice Experiences. Utilize critical-thinking, problem-solving and communication skills to collect, assess, plan, implement and follow-up on patients at an introductory level. One lecture hour and three laboratory hours a week for one semester. Offered on the letter-grade basis only.

PHM 081W. PharmD Year 1 Administrative Session I.
Co-curricular and supplemental material for students in the first year of the Pharmacy (PharmD) program. One lecture hour for one semester. Offered on the pass/fail basis only. Prerequisite: Admission to the Pharmacy (PharmD) program.

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 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, 282F. 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 nonpharmacologic recommendations. For each hour of credit earned, one lecture hour a week for one semester. Pharmacy 172E and Pharmacy PharmD 282F may not both be counted. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 282E (or Pharmacy 262D).

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, and consent of instructor.

PHM 182I. Nonprescription Pharmacotherapeutics and Self-Care: Introductory Pharmacy Practice Experience.
Restricted to students in the College of Pharmacy. Participate in a hands-on experience in a community pharmacy setting related to the pharmacist's consultant role in nonprescription product selection (including complementary and alternative medicine) and non-pharmacologic recommendations in self-care. The equivalent of two hours of fieldwork a week for one semester. Only one of the following may be counted: Pharmacy PharmD 182P, 182I, Pharmacy 172P. Offered on the pass/fail basis only. Prerequisite: Current intern registration with the Texas State Board of Pharmacy; credit or registration for Pharmacy PharmD 282F.

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.

Restricted to students in the College of Pharmacy. Explore an overview of the fundamentals of integrative medicine, including Traditional Chinese Medicine (TCM). Examine an interprofessional perspective of the interview and assessment of patients and the clinical reasoning used to develop patient care plans. For each semester hour of credit earned, one lecture hour a week for one semester. Offered on the letter-grade basis only.

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. Only one of the following may be counted: Pharmacy PharmD 182P, 182I, Pharmacy 172P. 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.

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 182V. Pharmacy Practice Lab II.
Restricted to students in the College of Pharmacy. Navigate the pharmacists’ patient care process in preparation for Introductory Pharmacy Practice Experiences. Utilize critical-thinking, problem-solving and communication skills to collect, assess, plan, implement and follow-up on patients at an advanced introductory level. One lecture hour and three laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Pharmacy PharmD 181V.

PHM 082W. PharmD Year 1 Administrative Session II.
Co-curricular and supplemental material for students in the first year of the Pharmacy (PharmD) program. One lecture hour a week for one semester. May be repeated for credit. Offered on the pass/fail basis only. Prerequisite: Admission to the Pharmacy (PharmD) program.

PHM 383, 483. Pharmacotherapeutics of the Cardiovascular System.
An integrated approach to the etiology and treatment of disease states of the cardiovascular system. 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: Pharmacy PharmD 383, 483, 685D, Pharmacy 665E. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Pharmacy PharmD 480D and 182.

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 pass/fail basis only. Prerequisite: Pharmacy PharmD 388M (or Pharmacy 356C), 188P (or Pharmacy 156P) and credit or registration for 183F (or Pharmacy 183F).

PHM 383I. Institutional Introductory Pharmacy Practice Experience.
Restricted to students in the College of Pharmacy. Participate in a hands-on experience at an institutional practice care facility; examine pharmacy services, hospital pharmacy management, staff interaction, and the flow of information from pharmacy to bedside. The equivalent of five and one-half lecture hours a week for one semester. Only one of the following may be counted: Pharmacy PharmD 383I, 386H and Pharmacy 377H. Offered on the pass/fail basis only. Prerequisite: Current intern registration with the Texas State Board of Pharmacy; completion of the second professional year of pharmacy school.

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 283L. Health Behavior and Health Outcomes.
Restricted to students in the College of Pharmacy. Explore the concepts and principles of health behavior and health outcomes in a multicultural U.S. population. Two lecture hours a week for one semester. Only one of the following may be counted: Pharmacy PharmD 281L, 283L, Pharmacy 244C. Offered on the letter-grade basis only.

PHM 383M. Health Innovation Entrepreneurship.
Restricted to graduate and professional students. Explore a highly interactive and interdisciplinary approach for developing health innovation, including drug product, devices, and digital health solutions. Examine foundational entrepreneurial and innovation concepts for identifying and developing ideas, performing market validation, conducting customer discovery, assessing competition, and identifying skills for effectively working in teams. Three lecture hours a week for one semester. Only one of the following may be counted: Pharmacy Graduate Studies 380M (Topic: Entrepreneurship/Hlth InnoV), 383M, Pharmacy PharmD 382R (Topic: Entrepreneurship/Hlth InnoV), 383M. Offered on the letter-grade basis only.

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 183V. Pharmacy Practice Lab III.**

Restricted to students in the College of Pharmacy. Navigate the pharmacists’ patient care process in preparation for Introductory Pharmacy Practice Experiences. Utilize critical-thinking, problem-solving and communication skills to collect, assess, plan, implement and follow-up on patients at an intermediate level. One lecture hour and three laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Consent of instructor.

**PHM 083W. PharmD Year 2 Administrative Session I.**

Co-curricular and supplemental material for students in the second year of the Pharmacy (PharmD) program. One lecture hour a week for one semester. May be repeated for credit. Offered on the pass/fail basis only. Prerequisite: Completion of the first year in the Pharmacy (PharmD) program.

**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 486 or 685E (or Pharmacy 675E).

**PHM 284E, 384E. Pharmacy Law.**

State and federal pharmacy laws. For each semester hour of credit earned, one lecture hour a week for one semester. Pharmacy PharmD 284E and Pharmacy 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 284I. Community Introductory Pharmacy Practice Experience.**

Restricted to students in the College of Pharmacy. Participate in a hands-on experience in a community pharmacy setting. Explore medication therapy management training, 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. The equivalent of five hours of fieldwork a week for one semester. Only one of the following may be counted: Pharmacy PharmD 284I, 287H and Pharmacy 287H. Offered on the pass/fail basis only. Prerequisite: Current intern registration with the Texas State Board of Pharmacy; Completion of the second professional year of pharmacy school.

**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 283L (or 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 letter-grade basis only. Prerequisite: Pharmacy PharmD 283L (or 281L or Pharmacy 244C).
PHM 184M, 284M. Pharmacy Professional Communications.
Professional communication skills in interacting with patients and other health care professionals. For each hour of credit earned, one lecture hour a week for one semester. Pharmacy 266P and Pharmacy PharmD 284M may not both be counted. Offered on the letter-grade basis only.

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 184V. Pharmacy Practice Lab IV.
Restricted to students in the College of Pharmacy. Navigate the pharmacists’ patient care process in preparation for Introductory Pharmacy Practice Experiences. Utilize critical-thinking, problem-solving and communication skills to collect, assess plan, implement and follow-up on patients at an advanced intermediate level. One lecture hour and three laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Pharmacy PharmD 183V.

PHM 084W. PharmD Year 2 Administrative Session II.
Co-curricular and supplemental material for students in the second year of the Pharmacy (PharmD) program. One lecture hour a week for one semester. May be repeated for credit. Offered on the pass/fail basis only. Prerequisite: Completion of the first year of the Pharmacy (PharmD) program.

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 185I. Ambulatory Introductory Pharmacy Practice Experience.
Restricted to students in the College of Pharmacy. Participate in a hands-on experience in an ambulatory pharmacy setting. Work on patient care plans, review and evaluate patient medication lists, identify goals for common chronic disease states, utilize formularies in making drug therapy decisions, and assess appropriate resources to respond to drug information questions in an ambulatory setting. The equivalent of two hours of fieldwork a week for one semester. Offered on the pass/fail basis only. Prerequisite: Current intern registration with the Texas State Board of Pharmacy; Completion of the second professional year of pharmacy school.

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 285M. Patient-Centered Diabetes Care.
Explore a practice-based approach to the non-pharmacologic and pharmacologic management of diabetes in multiple pharmacy practice settings. Two lecture hours a week for one semester. Pharmacy PharmD 282R (Topic: Patient Cntrd Diabetes Care) and 285M may not both be counted. Prerequisite: Pharmacy PharmD 185.

PHM 185N. Biomedical and Professional Ethics.
Restricted to students in the College of Pharmacy. Explore biomedical and professional ethics and the implications and challenges for pharmacy practice. Examine core principles and theories in biomedical and professional ethics including the pharmacy code of ethics and codes of ethics for other healthcare practitioners. One lecture hour a week for one semester. Only one of the following may be counted: Pharmacy PharmD 184N, 185N, Pharmacy 176E. Offered on the letter-grade basis only. Prerequisite: Admission to the professional pharmacy curriculum.

PHM 185V. Pharmacy Practice Lab V.
Restricted to students in the College of Pharmacy. Navigate the pharmacists’ patient care process in preparation for Introductory Pharmacy Practice Experiences. Utilize critical-thinking, problem-solving and communication skills to collect, assess plan, implement and follow-up on patients at an advanced level. One lecture hour and three laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Pharmacy PharmD 184V.

PHM 085W. PharmD Year 3 Administrative Session I.
Co-curricular and supplemental material for students in the third year of the Pharmacy (PharmD) program. One lecture hour a week for one semester. May be repeated for credit. Offered on the pass/fail basis only. Prerequisite: Completion of the second year of the Pharmacy (PharmD) program.

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 186E, 286E. Careers in Academic Pharmacy.
Restricted to students in the College of Pharmacy. Examine pharmacy education with a focus on the three pillars of academia: teaching, service, and scholarship. For each semester hour of credit earned, one lecture hour a week for one semester Pharmacy PharmD 182R (Topic: Careers in Academic Pharm) and 186E may not both be counted. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 181T, or consent of instructor.

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. Only one of the following may be counted: Pharmacy PharmD 383I, 386H and Pharmacy 377H. Offered on the pass/fail 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. Pharmacy 329C and Pharmacy PharmD 386K may not both be counted. Prerequisite: Pharmacy PharmD 283L (or 281L or Pharmacy 244C) and consent of instructor.

PHM 186M. Advanced Oncology.
Review supportive care and symptom management for oncology patients, cancer types and treatments. Examine clinical trials, new cancer types, and palliative care/end-of-life. Discuss and debate clinical controversies in oncology treatment. One lecture hour a week for one semester. Pharmacy PharmD 186M and 182R (Topic: Oncology Elective) may not both be counted. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Pharmacy PharmD 288.

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 pass/fail basis only. Prerequisite: Current intern registration with the Texas State Board of Pharmacy, and completion of the first professional year in the College of Pharmacy.

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: Pharmacy 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 186V. Pharmacy Practice Lab VI.
Restricted to students in the College of Pharmacy. Navigate the pharmacists’ patient care process in preparation for Introductory Pharmacy Practice Experiences. Utilize critical-thinking, problem-solving and communication skills to collect, assess, plan, implement and follow-up on patients. One lecture hour and three laboratory hours a week for one semester Offered on the letter-grade basis only. Prerequisite: Credit or registration for Pharmacy PharmD 185V.

PHM 086W. PharmD Year 3 Administrative Session II.
Co-curricular and supplemental material for students in the third year of the Pharmacy (PharmD) program. One lecture hour a week for one semester. May be repeated for credit. Offered on the pass/fail basis only. Prerequisite: Completion of the second year of the Pharmacy (PharmD) program.

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 187E. Emotions, Ethics, and Empathy.
Restricted to students in the College of Pharmacy. Explore emotions, ethics, and what it means to be an empathetic pharmacist. One lecture hour a week for one semester Pharmacy PharmD 182R (Topic: Emotions Ethics and Empathy) and 187E may not both be counted. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 185N, or consent of instructor

PHM 187F. Foundations of Patient-Centered Care I.
Restricted to students in the College of Pharmacy. Explore a broad overview of the pharmacist’s role in patient-centered care through lectures, simulations, activities, and writing assignments. One lecture hour a week and seven additional fieldwork hours for one semester. Only one of the following may be counted: Pharmacy 242D, Pharmacy PharmD 287D, 187F. Offered on the letter-grade basis only.

PHM 187G. Foundations of Patient-Centered Care II.
Restricted to students in the College of Pharmacy. Continue to explore a broad overview of the pharmacist’s role in patient-centered care through lectures, simulations, activities, and writing assignments. One lecture hour a week and seven additional fieldwork hours for one semester. Only one of the following may be counted: Pharmacy 242D, Pharmacy PharmD 287D, 187G. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Pharmacy PharmD 187F.

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. Only one of the following may be counted: Pharmacy PharmD 284L, 287H and Pharmacy 287H. Offered on the pass/fail 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).
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 and 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 letter-grade basis only. Prerequisite: Admission to the professional pharmacy curriculum.

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 letter-grade basis only. Prerequisite: Admission to the professional pharmacy curriculum.

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 288E. Clinical Drug Development: Regulatory Perspectives.
Restricted to students in the College of Pharmacy. Explore the regulatory affairs involved in the review, submission, and design of clinical trials for compounds being considered for Food and Drug Administration approval. Two lecture hours a week for one semester Pharmacy PharmD 282R (Topic: Drug Devlpmt Clin Perspective) and 288E may not both be counted. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 388M or consent of instructor.

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 188K, 288K, 388K. Hospital Pharmacy.
Restricted to students in the College of Pharmacy Basic principles, standards, and procedures involved in providing professional pharmaceutical services in hospitals. For each semester hour of credit earned, one lecture hour a week for one semester. Only one of the following may be counted: Pharmacy 372K, Pharmacy PharmD 188K, 288K, 388K.

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 389E. Modern Trends in Drug Design.
Restricted to students in the College of Pharmacy. Examine drug metabolism, pharmacogenomics, mechanisms of drug action, and approaches used in modern drug discovery and development. Three lecture hours a week for one semester. Only one of the following may be counted: Pharmacy Graduate Studies 396M, Pharmacy PharmD 382R (Topic: Mdrn Trends in Drug Design), 389E. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 388M or consent of instructor.

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) and 282F.

PHM 389M. Fundamentals of Health Innovations.
Restricted to students in a professional program. Explore foundational innovation and entrepreneurship concepts related to the process of developing novel drug therapies, medical devices, diagnostics, and digital health products and services. Three lecture hours a week for one semester. Only one of the following may be counted: Pharmacy Graduate
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. Only one may be counted. 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: Consent of instructor.

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 390D. 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: Consent of Pharmacy PharmD 185V.

PHM 390E. Controlled Substances: Violations, Investigations, and Enforcement.
Restricted to students in the College of Pharmacy. Explore violations of federal and state-controlled substances laws and rules, and analyze the pharmacist’s role in enforcement. Three lecture hours a week for one semester Pharmacy PharmD 382R (Topic: Cntrld Subst Violtn Invgtn) and 390E may not both be counted. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 185N or consent of instructor.

PHM 390H. Pharmacy Research Honors Proposal.
Restricted to students in the College of Pharmacy. Write a research proposal and conduct a research project under the supervision of one or more faculty members. The equivalent of four laboratory hours a week for one semester. Offered on the letter-grade basis only.

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: Consent of instructor.

PHM 390L. 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 PharmD 290L may not be counted. Prerequisite: Consent of instructor.

PHM 390M. 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 PharmD 290M may not be counted. Offered on the letter-grade basis only. Prerequisite: Consent of instructor.

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 PharmD 390N may not be counted. Only one of the following may be counted: Pharmacy 371S and Pharmacy PharmD 390N. Offered on the letter-grade basis only. Prerequisite: Consent of instructor.

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 PharmD 390T may not be counted. Prerequisite: 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: Consent of instructor.

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
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 193U who elect to serve in a leadership role for the community service-learning project. Coordinate and organize responsibilities at each phase of the project, communicate with community partners, and additional outreach based on the needs of the community partner. Develop a plan and disseminate the project outcomes. The equivalent of one lecture hour a week for one semester. Pharmacy 171L and Pharmacy PharmD 191L may not both be counted. Prerequisite: Credit or registration for Pharmacy PharmD 193U.

PHM 291M. Introduction to Ambulatory Care Pharmacy.
Clinical and non-clinical concepts 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 real-world situations. Two lecture hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 282E, and 282F (or 182F).

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.
on the letter-grade basis only. Prerequisite: Completion of the second professional year of pharmacy school.

**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 pass/fail 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 pass/fail 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 393F. Pharmacoeconomics and Pharmacy Management.**

Restricted to students in the College of Pharmacy. Explore the terms, concepts, procedures, methods, problems, and strengths associated with pharmacoeconomics. Examine and utilize health information resources to manage medication use and minimize medication errors. Evaluate information regarding the financial status of the pharmacy and implications of the decisions faced by managers in reaching financial goals for the pharmacy. Three lecture hours a week for one semester. Only one of the following may be counted: Pharmacy 394F, Pharmacy Graduate Studies 393T, Pharmacy PharmD 393F, 394F. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 384L (or Pharmacy 364D) or consent of instructor.

**PHM 293H. Pharmacy Research Honors Thesis.**

Restricted to students in the College of Pharmacy. Conduct a research project and write an honors thesis under the supervision of one or more faculty members. The equivalent of four laboratory hours a week for one semester. Offered on the letter-grade basis only. Prerequisite: Credit or registration for Pharmacy PharmD 292H.

**PHM 193M. Pharmacy Residency Preparation.**

Restricted to students in the College of Pharmacy. Explore pharmacy residency and the skills needed to be competitive residency applicants. One lecture hour a week for one semester. Offered on the letter-grade basis only. Prerequisite: Completion of the second professional year of pharmacy school or consent of instructor.

**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 pass/fail 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 pass/fail 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), 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 pass/fail 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), 694S (or Pharmacy 694S), or 695E (or Pharmacy 695E).
PharmD 693C (or Pharmacy 693C), 693E (or Pharmacy 693E), 693N professional year in the College of Pharmacy; during the fall and spring 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 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 pass/fail 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 pass/fail 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 pass/fail 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 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 pass/fail 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 394F, Pharmacy Graduate Studies 393T, Pharmacy PharmD 393F, 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 pass/fail 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 pass/fail 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 pass/fail 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, 295Q. 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. For each semester hour of credit earned, one lecture hour a week for one semester. Pharmacy PharmD 195Q and Pharmacy 163D may not both be counted. Offered on the letter-grade basis only. Prerequisite: Pharmacy PharmD 187G or 287D (or Pharmacy 242D)

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 295Q. 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), or 295Q.

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, 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.