

Natural Sciences (NSC)

NSC 301C Freshman Seminar 3 Hours

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.

NSC 001F Experiential Learning 0 Hours

Course may include research, career and networking events, student and community speakers, and other subjects related science. Emphasis on student participation.

NSC 001S Natural Sciences Seminar 0 Hours

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.

NSC 302 Texas Interdisciplinary Plan: Critical Thinking Seminar 3 Hours

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.

NSC 303 Creative Communication of Scientific Research 3 Hours

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.

NSC 106, 206 Dialogue Across Difference: Identity, Power, and Privilege 1-2 Hours

Explore frameworks, terminology, critical thinking, and empathy tools for engaging in productive conversations around difficult subjects related to diversity, equity, and inclusion (DEI). Examine DEI resources, issues, and challenges across campus.

NSC 207 Diversity, Equity, and Inclusion Capstone 2 Hours

Use critical, reflective thinking, and effective problem solving to: identify a diversity, equity, and inclusion (DEI) issue on campus or in the community to address and propose a solution or steps toward a solution; develop leadership in the DEI concentration; facilitate debriefs of DEI events and assist with concentration development.

NSC 107J The Effective Health Care Professional 1 Hour

Introduction to careers in the health professions. Discuss the intra- and inter- personal core competencies of the professions sought in healthcare providers. Work on the critical reasoning skills needed to succeed on reading comprehension and situational judgment tests found on traditional professional school placement exams.

NSC 107K Thriving in a Collaborative Healthcare Environment 1 Hour

Introduction to the collaborative relationship between the health professions. Work on the critical reasoning skills needed to succeed on reading comprehension and situational judgment tests found on traditional professional school placement exams.

NSC 107M Introduction to the Health Professions Action Plan 1 Hour

Discuss the steps necessary to complete a competitive application to professional school including the generation of an effective application, personal statement, and the refinement of skills for a successful professional school interview.

NSC 108, 208, 308, 408, 508, 608, 708, 808, 908 Topics in Natural Sciences 1-9 Hours

NSC 108.1, 208.1, 308.1, 408.1, 508.1, 608.1, 708.1, 808.1,

908.1 Capstone Prospectus Seminar 1-9 Hours

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.

NSC 108.2, 208.2, 308.2, 408.2, 508.2, 608.2, 708.2, 808.2,

908.2 Evidence and Inquiry Proposal Seminar 1-9 Hours

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.

NSC 109, 209, 309 Topics in Natural Science 1-3 Hours

NSC 109.1, 209.1, 309.1 Planning Your Capstone Experience 1-3 Hours

Develop a feasible capstone experience and consult with subject matter experts. Explore substantive writing instruction to develop a proposal that describes and justifies the capstone experience.

NSC 109.2, 209.2, 309.2 Health Science Scholars Capstone Experience Preparation 1-3 Hours

Explore and determine a viable capstone experience to prepare for the honors thesis. Consult with subject matter experts. Receive substantial writing instruction to develop a written proposal that defends the capstone experience.

NSC 109.3, 209.3, 309.3 Natural Sciences Ethics Seminar 1-3 Hours

NSC 109.4, 209.4, 309.4 Polymathic Capstone Field Invention 1-3 Hours

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.

NSC 109.5, 209.5, 309.5 Introduction to Applied Problem Solving 1-3 Hours

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 2 Hours

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.

NSC 110E Internship in the Sciences 1 Hour

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.

NSC 110H Topics in Natural Sciences Honors Seminar 1 Hour

Emphasis on student participation. Format may include student speakers, outside speakers, discussions, visits to laboratories, or other enrichment activities.

NSC 110H.1 Dean's Scholars First-Year Seminar 1 Hour

NSC 110H.2 Health Science Scholars First-Year Seminar 1 Hour

NSC 110H.3 Polymathic Scholars First-Year Seminar 1 Hour

NSC 311 Critical Reasoning 3 Hours

An examination of the fundamental concepts in critical reasoning, including the analysis of argument, application of intellectual standards, and the role of intellectual virtues.

NSC 115, 215 Women in Natural Sciences Seminar 1-2 Hours

The work and lives of women scientists in a sociocultural context.

NSC 118C, 218C, 318C Topics in Forum Seminar Series 1-3 Hours

Lectures and discussions on various contemporary issues. Emphasis on multidisciplinary perspectives and critical discourse.

NSC 119, 219, 319, 419, 519, 619 Topics in International Learning Seminars 1-6 Hours
Discussion of various issues related to the academic, cultural, and personal aspects of completing academic work in international locations.

NSC 119S, 219S, 319S, 419S, 519S, 619S, 719S, 819S, 919S Topics in Natural Science 1-9 Hours

To record credit earned 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 advisor in the College of Natural 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 studied program.

NSC 120E Internship in the Sciences 1 Hour

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.

NSC 321 Introduction to Peer Mentoring and Leadership 3 Hours
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.

NSC 122, 222, 322, 422, 522, 622, 722, 822, 922 Natural Science Topics 1-9 Hours

NSC 123, 223, 323, 423, 523, 623, 723, 823, 923 Natural Sciences Topics 1-9 Hours

NSC 123.1, 223.1, 323.1, 423.1, 523.1, 623.1, 723.1, 823.1, 923.1 Polymathic Capstone Thesis Preparation Seminar 1-9 Hours
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.

NSC 124, 224, 324, 424, 524, 624, 724, 824, 924 Natural Sciences Topics 1-9 Hours

NSC 325 Topics in Inventors Program Practicum 3 Hours
Design, research, prototype, and test a STEM-related product or solution.

NSC 326 Introduction to Scientific Programming 3 Hours
Introduction to programming using both the C and Fortran (95/2003) languages, with applications to basic scientific problems. Discuss common data types and structures, control structures, algorithms, performance measurement, and interoperability.

NSC 129, 229, 329, 429, 529, 629 Topics in International Learning Seminars 1-6 Hours
Discussion of various issues related to the academic, cultural, and personal aspects of completing academic work in international locations.

NSC 129S, 229S, 329S, 429S, 529S, 629S, 729S, 829S, 929S Topics in Natural Science 1-9 Hours
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 advisor in the College of Natural 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.

NSC 335 Scientific and Technical Computing 3 Hours
Introduction to computing techniques and methods applicable to many scientific disciplines and technical applications. Discuss computer hardware and operating systems, systems software and tools, code development, numerical methods and math libraries, and basic visualization and data analysis tools.

NSC 371 Capstone Thesis Seminar 3 Hours

Directed reading, research, and discussion followed by the writing of a substantial thesis.

NSC 180, 280, 380, 480, 580, 680 Topics in Research for Independent Study 1-6 Hours

Produce group and individual projects in research design, research methodologies, and research execution. Practice in a professional position under supervision.

NSC 088C Science Communications Seminar 0 Hours

Professional development supplemental to primary studies. Designed to develop skills in the effective communication of scientific concepts.

NSC 088D Science Communications Practicum 0 Hours

Professional development supplemental to primary studies. May be taken concurrently with the Science Communication Seminar. Opportunities to focus on skill development while receiving constructive assessment and evaluation.

NSC 088E Professional Ethics and Social Responsibility in Research 0 Hours

NSC 088G Concentration on Science in Public Policy 0 Hours

NSC 088J Concentration in Science in Public Policy 0 Hours
Identify and articulate the relevance of scientific scholarship to public policy.

NSC 088L Introduction to Evidence-Based Teaching 0 Hours

Designed for graduate students interested in learning to teach science and mathematics effectively in their own courses, rather than as Teaching Assistants. Subjects include defining learning objectives, designing learning tasks, observing classrooms to identify effective teaching strategies, and practice teaching. Intended for graduate students in the College of Natural Sciences.

NSC 088M Mentoring Undergraduate Researchers 0 Hours

Aims to develop graduate students' skills in mentoring undergraduates and other junior participants in STEM research. Explores how to define suitable projects, establish appropriate relationships, set expectations, encourage communication, balance guidance with independence, and address diversity and ethical issues in mentoring.

NSC 088P Leading People and Organizations 0 Hours

Professional development supplemental to primary studies. Designed for graduate students in STEM disciplines. Explores the knowledge and skills necessary for scientists to manage and lead effectively within organizations.

NSC 088S Strategic Management 0 Hours

Professional development supplemental to primary studies. Designed to help students develop general management skills such as managing change strategically, implementing strategy, and addressing long-term health of an organization.

NSC 088T Mentored Teaching 0 Hours

Designed for graduate students who have completed NSC-088L Introduction to Evidence-Based Teaching, or its equivalent. Each student will design, teach, and conduct assessment of an instructional unit (~3 hours of class time) in an undergraduate CNS course, working in collaboration with the faculty member acting as instructor of record. Intended for graduate students in the College of Natural Sciences.

NSC 088V STEM Professional Development 0 Hours

