Arts and Sciences Education

The academic program offered cooperatively by the College of Natural Sciences and the College of Liberal Arts provides what is sometimes referred to as a "liberal arts" or an "arts and sciences" education. No matter what area of knowledge a student intends to specialize in, the program of study will require courses in both colleges. The colleges work together to ensure that the individual interests and needs of the students pursuing an arts and sciences program are met.

Guidelines for developing a coherent plan of study are provided by major requirements, by sequential prerequisites, and by optional patterns of emphasis. Departmental majors, areas of specialization, and interdepartmental programs are designed to enable every student to study at least one field in depth. These programs are sufficiently broad in scope to allow students in the same major to develop quite different plans of study in pursuit of their individual interests and goals. Each student should choose courses that are intellectually challenging and that contribute to his or her long-term objectives.

Arts and sciences students are required to take a certain number of courses in the natural sciences, the social and behavioral sciences, and the humanities. Consequently, whatever their fields of study, they have the opportunity to learn something about the basic differences in the ways questions are raised and answered in several fields of inquiry, and about the techniques for validating the answers and putting the results to use. At the same time, they may gain some of the philosophical and historical perspectives that illuminate and give form to general or specialized knowledge and help to reveal its relevance.

Both teachers and students sometimes make the assumption that independent and creative study is exclusively for the gifted. In fact, the primary requirement is that the student be highly motivated, although he or she must also demonstrate ability. The departments that make up the two arts and sciences colleges encourage all qualified students to work independently in special honors courses and seminars and in conference, studio, or laboratory work. The student is free to define a major, to determine whether a given assignment will be an adventure or a chore, free to develop its latent possibilities or merely satisfy its explicit demands. True creativity presupposes more than a gift for innovation; it requires an unceasing commitment to thinking and working at one's highest level.

As competence is gained in a chosen field, the mind should be progressively sharpened, disciplined, and enriched. The student who leaves arts and sciences studies with an enhanced understanding of self and humankind, of cultural and historical heritage, of the world and the universe, and of the moral values that make it possible to live a meaningful life, will have made the most of education, having gained something over and above the objective of vocational preparedness.

Financial Assistance Available through the College

A number of scholarship funds established by individuals, foundations, and industrial or research organizations are available to students in the college. Awards are made for reasons ranging from academic promise to financial need. More information about scholarships is given at <u>http://cns.utexas.edu/honors/scholarships/scholarship-policies</u>.

Student Services

Academic Advising

Academic advising is a responsibility shared by advisors and students. Advisors help students clarify their values and goals, assist with the selection of courses, and monitor and evaluate students' progress toward their degrees. Each student is assigned an academic advisor in his or her proposed field of study; students are expected to communicate with their advisors before registration each semester.

Career Services

Career Services is a multidisciplinary hub for students to explore the next phase of their professional or educational career. Additional information is given on the <u>Career Services website</u>.

Study Abroad (International Study)

Students are encouraged to incorporate an international experience into their course of study. In addition to the traditional study abroad programs, students may take advantage of programs specifically designed for science study, including faculty-led courses, May term courses, and research abroad. The Texas Institute for Discovery Education in Sciences (TIDES) provides information sessions, oneon-one advising, and resources for science students interested in these programs. For more information, see <u>https://cns.utexas.edu/</u> international-study.

Student Programs

The College of Natural Sciences offers additional programs to supplement the degree plans. Additional information is given at <u>https:// cns.utexas.edu/student-communities</u>.

Actuarial Studies Program

The Actuarial Studies Program at The University of Texas at Austin has a long and distinguished history of producing well-prepared students, many of whom have become leaders of the actuarial profession. In the Society of Actuaries classification of North American actuarial programs, our program qualifies as one of about 70 advanced undergraduate programs and as one of about 30 graduate education or graduate education and research programs - thus providing a thorough preparation for entering an actuarial career. For more information, see <u>https://sites.cns.utexas.edu/actuarial-science/home</u>.

Biology Scholars Program

The Biology Scholars Program (BSP) is designed to provide lowerdivision biochemistry and biology students with a broader understanding of the study of biology and a strong sense of community as they begin their academic careers. Throughout the two-year program, BSP provides academic support, resources for peer-led study, and community service opportunities. Each semester, BSP students take a specialized critical thinking seminar on topics that range from the study of biological sciences to graduate and professional careers in biology. These classes emphasize working in small groups and help BSP students develop strong problem-solving and study skills.

Cornerstones Program

All entering Natural Sciences majors, freshman or transfer, are eligible for participation in the Cornerstones Program. The guiding principles for students are to connect, acclimate, navigate, and explore. Each entering freshman joins a small learning community led by a faculty or staff advisor and a peer mentor. The key components of Cornerstones are creating small learning communities, gaining tools to succeed in college, learning about majors, and developing skills and experiences to launch successful careers upon graduation. Transfer students are given the option to join the program. More information is available at <u>https://cns.utexas.edu/student-communities/cns-cornerstones-communities</u>.

Freshman Research Initiative

The Freshman Research Initiative in the Texas Institute for Discovery Education in Science (TIDES) introduces undergraduate students to the world of scientific research at the beginning of their academic careers by integrating a three-semester research experience into coursework required for the degree. All students begin with an introductory research methods course in the first semester, followed by two semesters of work on real, cutting-edge research projects in fields like biology, biochemistry, nanotechnology, molecular biology, astronomy, physics, mathematics, and computer science. After finishing the course sequence, interested students are assisted in joining faculty or other research laboratories for further work.

Texas Interdisciplinary Plan

The Texas Interdisciplinary Plan (TIP) transforms the learning experience for its scholars by creating small academic communities that promote academic excellence and leadership. TIP offers students who have excelled in high school and are enrolled in the College of Natural Sciences a unique opportunity to continue their academic excellence through managed courses, mentoring, collaborative study, dedicated professional academic advising, and academic and social connections. More information is available from the TIP office and at <u>https:// cns.utexas.edu/tip-scholars</u>.

Undergraduate Research

One advantage that the University offers undergraduates is the opportunity to participate in state-of-the-art research with some of the world's most respected scientists. Each department in the College of Natural Sciences supports undergraduate research programs in which students may earn University credit. Students may also earn special departmental honors for exceptional research. The college holds an annual Undergraduate Research Forum to recognize and reward students who participate in research. Additional opportunities vary from department to department; information is available in the Office for Honors, Research, and International Study.

UTeach-Natural Sciences

UTeach-Natural Sciences is an innovative teacher preparation program that allows students to pursue middle school and secondary teacher certification within a four-year mathematics, science, or computer science degree program. While learning the subject matter of their majors, students also learn how to teach. Upon completing the program, students graduate with a bachelor's degree and are recommended for a middle school or secondary teaching certificate. The UTeach-Natural Sciences program invites students to explore their interest in teaching as early as the freshman year. Through courses taught by some of Texas's most respected secondary math and science teachers, students learn quickly whether they are suited to the profession. More information about teacher certification requirements is given in the <u>UTeach Natural Sciences Secondary Teaching Option Certificate</u> and <u>UTeach Teacher Certification</u> for additional information.

Women in Natural Sciences

The Women in Natural Sciences (WINS) Honors Residential Program is designed to promote the involvement and success of women in the sciences. Students live together in an honors dormitory during their first year and participate in socially and educationally enriching activities. In their first semester they take an innovative small seminar class in which they are introduced to faculty members in their areas of interest. Through the seminar and a wide range of academic, cultural, and social events, WINS students are connected with other students and faculty members who share their interest in science.